7th INTERNATIONAL EMERGENCY AND INTERNAL MEDICINE CONGRESS

25-28 NOVEMBER 2021

MERIT CYRSTAL COVE HOTEL, TURKISH REPUBLIC OF NORTHERN CYPRUS

BİLDİRİ KİTABI

ETHICON event & congress

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BİLİMSEL PROGRAM

25 November 2021 Thursday Hall A

Time	Subject and Speakers
14.00 - 16.00	CHECK-IN TO HOTEL
16.00 - 18.00	Turkish Republic of Northern Cyprus - Republic of Turkey Republic of Azerbaijan - Republic of Georgia Ukrainian People's Republic and the Republic of Serbia – Republic of Nothern Macedonia Emergency Medicine and Internal Diseases Workshop Prof. Dr. Başar CANDER Dr. Teona VARSHALOMIDZE Prof. Dr. Yurii VDOVYCHENKO Dr. Tatjana RAJKOVIC Dr. Vesna KRSTEVSKA
19.00 - 22.00	DINNER

26 November 2021 Friday Hall A

Time	Moderator	Subject and Speakers
09.00 - 10.00		OPENING SPEECHES Prof. Dr. Başar CANDER *President of EPAT* Prof. Dr. Kubilay ÜKİNÇ *Board Member of TIHUD* Dr. Yonca MORRİS *President of CTMC*
10.00 - 10.20		COFFEE BREAK
10.20 –11.40	Prof. Dr. Başar CANDER Prof. Dr. Zeynep ÇAKIR	**In-Hospital Basic Life Support** Prof. Dr. Zeynep ÇAKIR ***Blue Code Basic Principles and Organization*** Assoc. Prof. Dr. Burak KATİPOĞLU **In-Hospital Adult Advanced Life Support** Prof. Dr. Yavuz KATIRCI **In-hospital Post CPR Management** Dr. Eren SERT
12.30 - 13.30		LUNCH
13.30 - 14.30	Prof. Dr. Başar CANDER	**Brainstorm on Diabetes, Hypertension and Dyslipidemia** **Prof. Dr. Mehmet Hakan KARPUZ** **Prof. Dr. Kubilay ÜKİNÇ**
14.30 - 14.45		COFFEE BREAK
14.45 - 15.25	Prof. Dr. Mehmet GÜL Dr. Yonca MORRİS	**Emergency Management of Hypo – hypernatremia** **Dr. Ayla KÖKSAL** **Emergency Management of Hypo – hyperkalaemia** **Prof. Dr. Mehmet GÜL**
15.25 - 15.40		BREAK TIME
15.40 - 16.25	Prof. Dr. Zeynep ÇAKIR	**Rational Use of Antibiotics** **Prof. Dr. Emin ÜNÜVAR**
16.25 16.30		BREAK TIME
16.30 - 17.30	Prof. Dr. Başar CANDER Dr. Aytan SHIKHALIYEVA Dr. Türker DEMİRTAKAN	Drug Selection in Diabetes Mellitus and Hypertension in the Elderly Patient Prof. Dr. Mustafa CANKURTARAN The Clinical Place and Importance of Clubbing Deformity Dr. Şeyda AMET Emergency Nursing New Field of Activity For Experienced Nurses Msc. Aleksandra Berdzinska WOLNY
19.00 - 22.00		DINNER

Time	Moderator	Subject and Speakers
10.30 - 11.00	Prof. Dr. Muhammet Gökhan TURTAY	ORAL PRESENTATIONS
11.00 - 11.15	BREAK TIME	
11.15 - 12.30	Assoc. Prof. Dr. Bedia GÜLEN	ORAL PRESENTATIONS
12.30 - 13.30	LUNCH	
13.30– 14.30	Assoc. Prof. Dr. Bedia GÜLEN	ORAL PRESENTATIONS
14.30- 16.00	Prof. Dr. Yavuz KATIRCI Assoc. Prof. Dr. İsmail Okan YILDIRIM	ORAL PRESENTATIONS
19.00 - 22.00	DINNER	

Time	Moderator	Subject and Speakers
09.00 - 10.15	Prof. Dr. Başar CANDER Prof. Dr. Muhammet Gökhan TURTAY	Management of Pancreatitis Prof. Dr. Yunsur ÇEVİK Chronic Liver Diseases and Common Complications Prof. Dr. Figen ÇOŞKUN Acute Problems and Management in Organ Transplant Patients Prof. Dr. Muhammet Gökhan TURTAY
10.15 - 10.40	COFFEE BREAK	
10.40 - 12.00	Assoc. Prof. Dr. Mustafa KEŞAPLI Prof. Dr. Behçet AL	Emergency Management of Renal Colic Assoc. Prof. Dr. Togay EVRİM Emergency Management of Patient with Renal Failure Assoc. Prof. Dr. Mustafa KEŞAPLI Hemodialysis - Dialysis Methods and Common Problems Assoc. Prof. Dr. Bedia GÜLEN Drug Use in Renal Failure Prof. Dr. Behçet AL
12.30 - 13.30	LUNCH	
13.30 - 14.30	Assoc. Prof. Dr. Murat KÖSE Assoc. Prof. Dr. Timur Selçuk AKPINAR	*21st Century Pandemic: Obesity* *Clinical Experiences in The Treatment of Obesity* Assoc. Prof. Dr. Murat KÖSE Assoc. Prof. Dr. Timur Selçuk AKPINAR
14.30-15.00	Prof. Dr. Zeynep ÇAKIR	Overactive bladder treatment in males and females Assoc. Prof. Dr. Özlem BİLİR
15.00 - 15.45	Prof. Dr. Mehmet GÜL	Misconceptions We Know About Low Back Pain Prof. Dr. Lale ALTAN İNCEOĞLU GENSENTA UYDU SEMPOZYUMU
15.45 - 16:00	COFFEE BREAK	
16:00– 16:40	Prof. Dr. Figen ÇOŞKUN	New Generation Oral Anticoagulants and Bleeding Prof. Dr. Ertuğrul OKUYAN 2020 AF Guidelines Assoc. Prof. Dr. İrfan ŞAHİN

16.40- 16.45	BREAK TIME	
16.45 -17.25	Assoc. Prof. Dr. Mustafa KEŞAPLI Dr. Tatjana RAJKOVIC	COVID-19 Overview Prof. Dr. Hakan OĞUZTÜRK What Did COVID-19 Taught Us in Terms of Medical Education? Could Everything Be TheSame After COVID-19? Assoc. Prof. Dr. Özlem BİLİR
19.00 - 22.00	DINNER	

Time	Moderator	Subject and Speakers
09.00 - 11.30	Prof. Dr. Başar CANDER	Hypertension/ Current Diagnosis and Treatment Prof. Dr Yavuz KATIRCI Pulmonary Thromboembolism/ Current Diagnosis and Treatment Prof. Dr. Başar CANDER
11.30 - 12.00	CLOSING SPEECH Prof. Dr. Başar CANDER Dr. Teona VARSHALOMIDZE Prof. Dr. Yurii VDOVYCHENKO Dr. Tatjana RAJKOVIC Dr. Vesna KRSTEVSKA	
12.00	CHECK-OUT FROM HOTEL	

POSTER BİLDİRİLER

POSTER 1

MYCOTOXINS, A RARE CAUSE OF TOXIC HEPATITIS

1Manisa Turgutlu State Hospital Internal Medicine Clinic, Manisa

2Manisa Merkez Efendi State Hospital Internal Medicine Clinic, Manisa

SUMMARY

The exact hepatotoxicity rate caused by the use of herbal products and dietary supplements is not known. Pattern of hepatotoxicity; It can be hepatocellular, cholestatic, a mixture of the two, or vascular (sinusoidal obstruction syndrome). Mycotoxins aspergillus, penicillium, fusarium and alternaria spp. They are secondary metabolism products that are produced by some pathogenic and spoilage molds, especially molds, which have toxic effects against humans and animals. We present a rare case of a 64-year-old male who developed toxic hepatitis after eating moldy cheese.

PHENOMENON

A 64-year-old male patient presented to us with nausea, vomiting, fatigue, darkening of the urine, and yellowing of the eyes that started 10 days ago. He had no known additional disease in his personal history. There was no feature in his family history. There was no medication that he used constantly. She had a history of eating moldy cheese 5 days before her complaints started. In physical examination; conscious, cooperative, oriented. Fever: 36.9°C, respiration 18 times/min, heart rate 120 beats/min, ta:150/93mmHg were found. Heart sounds were rhythmic; No murmur was detected. There was no defense or rebound. In laboratory studies, leukocyte: 9190/mm3, hemoglobin: 15.8 mg/dl, hematocrit: 45.8%, platelet: 133,000/mm3, aspartate aminotransferase: 1753 U/L (normal values: 0-35), alanine aminotransferase: 2489 U/L (normal values: 0-35), alkaline phosphatase: 150 U/L (normal values: 90-260), gamma-glutamyl-transferase: 374 U/L (normal values: 0-38), total bilirubin : 5.5 mg/dl (normal values: 0.1-1), direct bilirubin: 5.5 mg/dl (normal values: 0-0.2) albumin: 3.6 g/dl (normal values: 3 ,5-5), globulin: 3.2 g/dl (normal values: 2.5-3.5), sedimentation: 85 mm/hour. Serum urea, creatinine, sodium, potassium and calcium values were within normal limits. Hepatitis A, B, C and E serologies were negative. In coagulation, PT was 16.7 seconds and INR was 1.48 prolongation. Abdominal ultrasonography and mrcp did not detect cholestasis. MELD score was 18 and CHILD score was 9. Although acute hepatitis seen in liver needle biopsy may be due to viral hepatitis, viral serological findings do not support viral hepatitis infection. No significant portal inflammation and plasma cell infiltration were observed, suggesting an autoimmune etiology. The inflammatory infiltration observed in the parenchyma and the periportal zone is of mixed character, and sporadic

eosinophil cells are also seen. Therefore, toxic hepatitis was detected in the foreground.

ARGUMENT

Risk factors for toxic hepatitis include genetic factors, chemical content of the drug, age, gender, as well as other underlying diseases and chronic alcohol use (1,2). The risk is higher at older ages. More than 1100 toxic substances that are harmful to the liver can be counted (3,4). These substances can be used for therapeutic purposes as well as in suicide attempts, and one of the most commonly used drugs for suicide is acetaminophen (paracetamol).

CONCLUSION

Hepatotoxicity may present with a wide variety of clinical conditions; It can be acute, chronic and fulminant hepatitis as well as cirrhosis and tumor. Although it requires clinical and pathological correlation, its diagnosis is quite difficult. Toxic hepatitis should be included in the differential diagnosis in all cases with liver dysfunction. We wanted to emphasize the importance of this issue by presenting our case who developed toxic hepatitis after eating moldy cheese.

RESOURCES

1. Zimmerman HJ, Ishak KG. Hepatic injury due to drugs and toxins. In: MacSween RNM, Burt A, Portman Beds. Pathology of the liver. 4th ed. Philadelphia: Churchill Livingstone; 2002;14: 622–709.

2. Broulac-Sage P, Balabaud C. Toxic and drug induced disorders of the liver. In Odze R, Goldblum J, Crawford J eds. Surgical Pathology of the GI tract, Liver, Biliary tract and Pancreas. Philadelphia: Saunders; 2004; 833–61.

3 Kaplowitz N, Drug induced liver injury. Clin Infect Dis. 2004; 38: 544–8.

4. Abboud G, Kaplowitz N. Drug induced liver injury. Drug Pure. 2007; 30: 227-94.

POSTER 2

A RARE CASE OF PRIMARY BILILARY COLANGITIS WITH CREST SYNDROME

1Manisa Turgutlu State Hospital Internal Medicine Clinic, Manisa

2Manisa Merkez Efendi State Hospital Internal Medicine Clinic, Manisa

SUMMARY

Primary biliary cholangitis (PBK); It is an autoimmune liver disease that causes cholestasis as a result of lymphocytic infiltration of the interlobular and septal bile ducts, mostly in middle-aged women. Progressive cholestasis and fibrosis can cause cirrhosis and hepatocellular liver cancer (HCC). PBK may present with hepatic or extrahepatic findings. Extrahepatic findings accompany in 73% of patients with PBC. Skin diseases are reported sporadically with PBK. We present a rare case of primary biliary cholangitis accompanied by crest syndrome at the age of 57 years.

PHENOMENON

A 57-year-old female patient presented with itching, weakness, fatigue, and peeling on the hands, which had persisted for 2 years. His complaints had increased more significantly in recent months. She had type II diabetes mellitus for 7 years in her medical history. He gave a history of metformin use. There was no feature in his family history. On physical examination, she was conscious, cooperative, oriented, Height: 165 cm, Weight 90 kg, BMI: 33.1 kg/m2, mucocutaneous telangiectasia, sclera and skin xanthoma. There was desquamation, raynoud's phenomenon and sclerodactyly on the distal and trunk of both hands. In laboratory examinations, leukocytes: 8060/mm3, hemoglobin: 12 mg/dl, hematocrit: 36.2%, platelets: 356,000/mm3, aspartate aminotransferase: 49 U/L (normal values: 0-35), alanine aminotransferase: 53 U/L (normal values: 0-35), alkaline phosphatase: 1026 U/L (normal values: 90-260), gamma-glutamyl-transferase: 263 U/L (normal values: 0-38), total bilirubin: 0.36 mg /dl (normal values: 0.1-1), albumin: 3.9 g/dl (normal values: 3.5-5), globulin: 3.2 g/dl (normal values: 2.5-3, 5), iron 65 ug/dL, (normal values: 60-180), iron binding capacity 392 ug/dL, (normal values: 250-450), ferritin 27.8 ng/mL (normal values: 11-306), sedimentation : It was determined as 85 mm/hour. Serum urea, creatinine, sodium, potassium and calcium values were within normal limits. Antinuclear antibody (ANA), one of the autoimmune markers: 1/100 cytoplasmic reticular pattern, anti mitochondrial antibody AMA- compatible staining was found positive at 1/640 titers. Hepatitis A, B, C and E serologies were negative. There was no prolongation of coagulation. Cholestasis was not detected in abdominal ultrasonography and MRCP. We diagnosed PBK in our patient who had elevated ALP and had symptoms of itching and fatigue without obstruction of the extrahepatic bile ducts. Ursodeoxycholic acid was started at a dose of 13 mg/kg. After the treatment, there was a significant decrease in ALP, bilirubin, and GGT levels.

ARGUMENT

The exact cause of PBK is unknown, it is related to genetic susceptibility and environmental factors. T-lymphocytes play a direct role. It is generally seen in middle-aged women (1,2). It is 9 times more common in women than men. In our case, it was a middle-aged female patient. Less than 5 percent of patients with PBK develop xanthomas, which are cholesterol deposits in the skin (3,4). In our case, there was

xanthoma. The incidence of autoimmune diseases is increased in PBK patients. Cutaneous scleroderma may accompany PBK at a rate of 5-10%. In our case, the presence of Raynoud's phenomenon, sclerodaclitia, mucocutaneous telangiectasia, and desquamations made us think of limited cutaneous systemic sclerosis (crest syndrome).

CONCLUSION

PBK should be considered in patients with itching and fatigue symptoms without obstruction in the extrahepatic bile ducts with elevated ALP and should be questioned in terms of other accompanying autoimmune diseases.

RESOURCES

1. Akiyama Y, Tanaka M, Takeishi M, et al. Clinical, serological and genetic study in patients with CREST syndrome. Intern Med 2000;39:451-6.

2. Denton CP, Black CM. Scleroderma (Systemic Sclerosis). In: Wolff K, Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ, editors. Fitzpatrick's Dermatology in General Medicine, 7th ed. New York: McGraw Hill; 2008. p.1553-61.

3. Silver RM. D. Systemic Sclerosis. In: Demis J, editor. Clinical Dermatology, 1st ed. Philadelphia: Lippincott; 1997. p.1-16.

4. Ekmen SŞ. Connective Tissue Diseases. In: James WD, Berger TG, Elston DM, editors, Aydemir EH, translation editor. Andrews' Skin Diseases Clinical Dermatology, 10th ed. Istanbul: Istanbul Medical Publishing; 2008. p.172.

POSTER 3

THYROID HORMONE RESISTANCE A RARE CASE REPORT

Fatih İnce1 Burcu AlmacanİnceŞ2

1Manisa Turgutlu State Hospital Internal Medicine Clinic, Manisa

2Manisa Merkez Efendi State Hospital Internal Medicine Clinic, Manisa

SUMMARY

Thyroid hormone resistance (THD) is defined as a decrease in the response of target tissues to thyroid hormones. THD was first defined by Refetoff in 1967. In this article, we aimed to present a 22-year-old female patient who presented with palpitations, fatigue, and heat intolerance.

PHENOMENON

A 22-year-old female patient was admitted to our clinic with complaints of weakness, fatigue, heat intolerance and palpitation. In the patient's history, it was learned that TSH: 5.31uU/mL, fT3: 6.83 pg/mL, fT4: 2.43 ng/dL were found in the preoperative examinations performed before the tympanoplasty operation 2 years ago. Before your application to us; He had a history of using propranolol 2 x 5 mg/day perioral for 2 years and methimazole 10 mg/day for 1 year. He was using propranolol 2 x 5 mg/day perioral at the time of admission. In her family history, her grandmother had a history of hypothyroidism. On physical examination, height 160 cm, weight 65 kg, body mass index 25.4 kg/m2, body temperature 36.5 °C, respiration 18 times/min, heart rate 86 beats/min, blood pressure 120/80 mmHg detected. His palms were moist. Heart sounds were rhythmic; No murmur was detected. No nodule or a palpable firm mass was detected in the thyroid examination. Laboratory results are given in Table 1. In the thyroid ultrasonography; The parenchyma was found to be generally heterogeneous and compatible with thyroiditis in its reduced echo structure. Pituitary magnetic resonance imaging performed for the differential diagnosis of TSH-secreting pituitary adenoma was reported as normal. THRB gene mutation analysis was requested from the patient whose clinical history and laboratory were compatible with thyroid hormone resistance. After analysis, NM_00128177.1(THRB):c.1034G>A (p.Gly345Asp) mutation was detected.

CONCLUSION

Despite the increase in free thyroxine (FT4) and triiodothyronine (FT3) levels in thyroid hormone resistance, there is an unsuppressed thyroid stimulating hormone (TSH) level. Its incidence is 1:40,000 (1,2). It is a genetic disease with autosomal dominant or autosomal recessive inheritance. The treatment should focus on the patient's symptoms and clinical picture, not on the normal range of thyroid hormone levels (3). In conclusion, the diagnosis of THD requires a high degree of clinical suspicion and genetic mutation analysis should be requested in case of clinical suspicion. In this way, patients can be prevented from taking antithyroid therapy unnecessarily.

Table 1 Laboratory results of the patient

Laboratory Parameters	Laboratory Results
Laboratory Parameters	Laboratory Results
Glucose (ND: 70-100 mg/dl)	82
Creatinine (ND: 0.5-0.95 mg/dl)	0.6

AST (ND:0-35 U/L) 15

ALT (ND:0-35 U/L) 19

Sodium (ND:135-145 mEq/l) 137

Potassium (ND:3.5-5.1 mEq/l) 4.3

TSH (ND: 0.38-5.33 mIU/ml) 3.053

fT4 (ND: 0.61-1.3ng/dL) 2.66

fT3 (ND: 2.8-4.7 pg/mL) 6.5

Anti TG(ND: 0-4IU/mL) 4.3

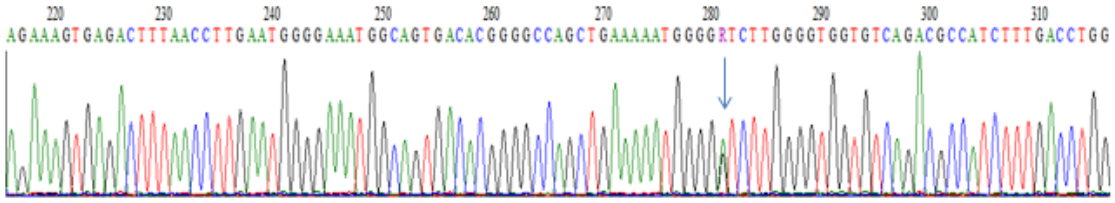
Anti -TPO (Anti Thyroid Peroxidase) (ND: 0-9IU/mL) 21.2

TSH Receptor Blocking Antibody (TRAB) (ND: <1.75IU/L) <0.300

Triglyceride(ND: 0-150 mg/dL) 110

*(ND: Normal Value Range)

NM_001128177.1(THRB):c.1034G>A (p.Gly345Asp)



RESOURCES:

1.Resistance to thyrotropin and thyrotropin-releasing hormone. Samuel Refetoff, MD Roy E Weiss, MD, PhD Helmut Grasberger, MD Literature review current through: Dec 2018. | Thistopiclastupdated: Jan 12, 2018.

2.Thyroid hormone resistance syndrome caused by heterozygous A317T mutation in thyroid hormone receptor β gene. Qing-HuaGuo, MD,Bao-An Wang, MD, Chen-ZhiWang, MD, MinWang,Ju-Ming Lu, MD, Zhao-HuiLv, MD, and Yi-Ming Mu, MD. Medicine (Baltimore). 2016 Aug; 95(33): e4415. Publishedonline 2016 Aug 19. doi: 10.1097/MD.0000000000004415PMCID: PMC5370793 PMID: 27537566
3.Thyroidhormoneresistanceanditsmanagement. Rivas AM, Lado-Abeal J,Proc (BaylUnivMedCent). 2016 Apr;29(2):209-11.

POSTER 4

HYPERTENSION AND ADDITIONAL DISEASES

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Objective: In our study, our aim was to examine the coexistence and frequency of chronic diseases.

Material and Method: A total of 1117 middle and elderly patients were included in the study. The patients were grouped according to the presence or absence of diabetes mellitus, hypertension, chronic obstructive pulmonary disease (copd), osteoporosis.

Results: 331 (29.6%) of the patients were diabetic. Hypertension was present in 198 (59.8%) of diabetic patients. Also, the presence of hypertension was statistically significant in diabetic patients (p: 0.000). Osteoporosis was present in 60 patients(5.4%). Twelve (3.6%) diabetic patients also had osteoporosis. The presence of osteoporosis was not statistically significant in diabetic patients (p: 0.093) .124 (11.1%) patients had copd. 38 (11.5%) of diabetic patients had copd. Also, the presence of copdwas not statistically significant in diabetic patients (p: 0.793). 530 patients (47.4%) had hypertension. Diabetes was present in 198 (37.4%) of

hypertensive patients. Also, the presence of dm in hypertensive patients was statistically significant (p: 0.000).38 of the patients (30.6%) had diabetes. At the same time, the presence of diabetes was not statistically significant in patients in the outpatient clinic (p: 0.791). Twelve (20.0%) osteoporotic patients also had diabetes. The presence of diabetes in patientswith osteoporosis was also not statistically significant (p: 0.093).

Conclusions: Common diseases can be controlled to reduce mortality and morbidity rates.

POSTER 5

Extremely gastrointestinal bleeding because of aortoenteric fistula from implanted inferior mesenteric artery to the aortic graft: (Case Report)

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Erciyes University, Department of General Surgery ***, Kayseri, TURKEY

Background: Aorto-enteric fistula may ocur after aortic graft operation. A case who had aorto bifemoral graft three years ago admitted with excessive gastrointestinal bleeding will be presented.

Object: A patient who had aorto bifemoral graft because of Leriche syndrome was admitted to an emergency department with hypotension and confusion. Emergency medication was quickly given. Gastrointestinal bleeding was diagnosed after taking patient history, patient blood tests and radiological examination. Endoscopic evaluation was performed and bleeding point was seen in second duodenal portion. Abdomen was reopened with midline incision in urgent situation.

Results: Retroperitoneal area was opened and aorto bifemoral graft was arounded with rubber snear. Duedonum was observed as ruptured and filled up clots. Bleeding point was seen on the aortic anastomotic site of implanted inferior mesenteric artery. It was controlled with primary suturation and duodenal defect was sutured primary. Postoperative course was uneventful. The patient was discharged 10 days later without complication.

Conclusion: Bleeding of aorto enteric fistula is very mortal emergency condition among reasons of gastrointestinal bleeding. Although it is not common among the causes of gastrointestinal bleeding in emergency practice, it is among the reasons that should be kept in mind. Effective approach to save patient life is hidden the take good anamnesis and quick pick up surgical team.

Key Words: Aorto-enteric fistula,

POSTER 6

Non occlusive mesenteric artery ischemia: Intestinoplasty and excessive medical solutions (Case Report)

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Background: Non occlusive mesenteric ischemia is an urgent clinical entity caused by severe splanic vasoconstriction without occlusion both artery and vein. This clinical situations will be presented and a patient who had diagnosed non occlusive mesenteric ischemia will be discussed under literature knowledge.
Object: A patient who was admitted to our emergency department with severe abdominal pain. Superior mesenteric artery flow was not seen in angiographic study. Abdomen was opened with midline incision. Massive ischemia was observed in ileal, jejunal and all of the colon segments. Only proximal 30 centimeter jejunal and distal 20 centimeter ileal segments of intestine observed non-ischemic.
Results: Superior mesenteric and inferior mesenteric artery were opened but flow in both arteries was pulsatile and enough in proximal portion. Embolectomy was performed but was taken any embolic material. After then İleocolic artery was opened near the colon. Embolectomy was retrogradely performed and was not taken any embolic materials again. 40 mg dilued papaverin was given within superior mesenteric artery. Total colectomy, total jejunectomy and hemi ileoectomy was performed. Enteroplasty was performed in healthy remmant ileal segment. İleostomy was opened and abdomen was closed with skin suturation but not fascia for second look. Vasodilatators (iloprost trometamol, pentoxifilin and papaverin), Low molecular weight heparin were ordered postoperatively. Second look operation was performed after 48 hours. Remmant ileal and jejunal segments were healthy and additionally

enteroplasty was performed for remnant ileal and jejunal segments. Abdomen was closed only skin sutures. The patient discharged 15 days later the surgery without any complication. Oral intake and electrolyte balance was good.
Conclusion: If there is no thrombus material causing mesenteric ischemia, we should think non occlusive mesenteric ischemia. Mortality and morbidity may be prevented with enteroplasty and excessive medical treatment.

Key Words: Non occlusive mesenteric ischemia, enteroplasty, massive ischemia

POSTER 7

Pathological Weight Loss and Elevated Ca19, 9; A Case Report with a Bad Start and a Happy Ended

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Introduction:
Autoimmune hepatitis, more common in females, elevated transaminase and immunoglobulin G levels, autoantibodyIt is a chronic liver disease in which the immune system plays a role in its etiopathogenesis, manifested by seropositivity and “interface” hepatitis findings in pathological examination. It may present with different clinical pictures ranging from asymptomatic transaminase elevation to cirrhosis and portal hypertension findings and fulminant hepatitis (1). There are many different phenotypes of autoimmune hepatitis; therefore, cirrhosis presenting with acute hepatitis with abnormal liver function tests
or patients with acute liver failure should be included in the differential diagnosis. takes (2).Autoimmune hepatitis; It is a disease that is difficult to diagnose and complicated to treat when diagnosed. Autoimmune hepatitis can be diagnosed by performing some tests and liver biopsy in people with elevated liver enzymes (ALT and AST). Antinuclear antibodies (ANA), smooth muscle antibodies (SMA), and antibodies against liver and kidney microsomes (anti-LKM) are the tests required to diagnose autoimmune hepatitis. However, high serum immunoglobulin G and presence of disease-related findings in liver biopsy are important. The results of all these tests are evaluated together and the diagnosis of autoimmune hepatitis is made (3). Corticosteroid alone or a combination of corticosteroid and azathioprine

are the current standard treatment options in autoimmune hepatitis. With these treatments, clinically good responses are obtained in the majority of patients (3).

Case Report:

A 57-year-old male patient who had intermittent abdominal pain for 3 months and applied to the emergency department frequently in the last 1 month; He applied to the Internal Medicine outpatient clinic with complaints of itching, abdominal pain and weight loss. In the first application examinations of the patient whose physical examination and vital signs were normal; hemoglobin:15.9gr/dl, white blood cell:8950ul,absoluteneutrophil count:5380ul, platelet:195000ul, glucose:138mg/dl, sodium:137meq/l, potassium:3.93meq/l, calcium:9.46mg/dl, albumin , alkalinephosphatase: 209 u/l, total bilirubin: 0.72 mg/dl, direct bilirubin: 0.37 mg/dl C-Reactive Protein: 18.2 mg/l, Ca 19.9: 335 U/mL. Abdominal ultrasonography and MR cholangiography were requested from the patient with complaints of elevated alkaline phosphatase and gammaglutamyltransferase, abdominal pain and itching. In abdominal ultrasonography, liver parenchyma was fine granular, heterogeneous, lobulated contours, micro and macro nodular structures were present, portal vein was 16 mm. MR cholangiography was normal. Viral hepatitis markers from the patient were negative. Anti Nuclear Antibody (ANA) spotted: 1/320-1/1000 positive, other serological tests were negative. Liver biopsy pathology result was reported as 'cirrhosis, fibrosis stage 6/6, autoimmune hepatitis'. In the light of all the data, the patient was accepted as having autoimmune hepatitis, steroid and ursodeoxycholic acid treatment was started. Azothioprine was added to the treatment of the patient who did not respond fully with steroid treatment.
After the treatment was started, regression was observed in the liver enzymes and Ca19-9 tests of the patient, who was followed up intermittently.

Conclusion :

The diagnosis of autoimmune hepatitis can be made by performing liver biopsy together with serological examinations in patients presenting with elevated liver enzymes. Our patient, who also had abdominal pain, weight loss, high ALP and GGT, ANA positivity and high Ca 19-9, was not found to be any other pathology to explain this situation in his examinations, and liver biopsy was performed and he was diagnosed with autoimmune hepatitis. In treatment, corticosteroid alone or in combination with azathioprine is used as a standard treatment approach (3). With this case, we wanted to emphasize that autoimmune hepatitis should be considered in unexplained liver enzyme elevations in middle-aged patients, and that sometimes benign results can be achieved as a result of clinical pictures that appear to have a malignant character.

References:

1-Manns MP, Lohse AW, Vergani D. Autoimmune hepatitis--Update. J Hepatol 2015; 62(1 Suppl): S100-11

2- http://guncel.tgv.org.tr/journal/79/pdf/100624.pdf.

3- Türkiye Karaciğer Araştırmları Derneği 2019

3-Pratt DS, Flavin DP, Kaplan MM. The successful treatment of autoimmune hepatitis with 6-mercaptopurine after failure with azathioprine. Gastroenterology 1996; 110:271.

POSTER 8

Emergmergency Services on the Bulky Tip of the Iceberg- Sepsis Overload

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Introduction:
Sepsis occurs in 10 out of every 1000 hospitalized cases, with MODS in 30% of these cases.
(multiple organ dysfunction syndrome); 20% of cases with sepsis, and 20% of cases with septic shock Mortality is rapidly reduced in case of delay in treatment, requiring rapid diagnosis and treatment, with 60-80% mortality.is an increasing clinical picture(1). Sepsis occurs in a minority of cases with bacteremia and is mostly bacterial. less viral and fungal infection agents are shown as causative agents (2). There are various scorings used in the diagnosis of sepsis.The most common and practical to use is qSOFA scoring. QUICK SOFA Scoring consists of 3 parameters. Hypotension <100 mmHg, GCS<13, tachypnea>22/min. If there is a score of 2 or more, the suspicion of sepsis should be high. Sepsis and septic shock are medical emergencies and it is recommended that treatment and resuscitation begin immediately (3). For adults with possible septic shock or a high probability of sepsis, it is recommended that antimicrobials be administered immediately, ideally within 1 hour of detection (3). In terms of source control culture samples, detailed physical examination and imaging methods should be used.

Case Report:
A 48-year-old male patient has been admitted to the emergency department with complaints of fever and excessive sweating for the past 1 week. When the patient with a known diagnosis of diabetes mellitus applied to the emergency department, he had fever: 36.4 °, blood pressure: 87/52 mm/Hg, heart rate: 127 beats/min, respiratory rate: 26/min, oxygen saturation: 97. In the physical examination; General condition was moderately conscious, oriented and cooperative, no pathological findings were detected in the systemic examination. Hemoglobin: 12.2 g/dl, white blood cell: 19790 ul, absolute neutrophil count: 18760ul, platelet: 155.000ul, glucose:

508mg/dl, sodium: 126 Meq/l, creatine: 2.91mg/dl, canurea nitrogen:34.6mg/dl,aspartataminotransferase(AST):105u/l,alaninamiotransferase(ALT):138u/l,gammaglutamyltransferase(GGT):265u/l,lactatedehydrogenase(LDH):528u/l, alkaline phosphatase(ALP):209u/l, C-reactive protein (CRP): 332.9 mg / l, procalcitonin: >100 one ng/ml pH: 7.289 HCO3 : 21.5 mmol/l , lactate: 6 mmol/l TIT: Bacteria: 5 HPF, Erythrocyte: 5 HPF, Leukocyte: 2 HPF, Ketone: negative, Nitrite: positive. The patient, who was followed up under positive inotropic support, was admitted to the Internal Medicine Intensive Care Unit with the preliminary diagnoses of hyperglycemia, sepsis and multiorgan dysfunction. Antibiotherapy, hydration and insulin therapy were started empirically. Abdominal imaging, which was evaluated as normal at the time of admission, was repeated, and a collection consistent with an abscess measuring approximately 11x 6 mm was observed in the subcapsular area at the junction of the liver segments 6-7. The patient was consulted to the Department of Interventional Radiology with the current imaging and liver abscess drainage was performed by the parties. Under abscess drainage and antibiotic therapy, the patient's acute phase reactants regressed and clinically improved. The patient, who completed her parenteral antibiotic therapy and stabilized clinically, was discharged with oral antibiotic therapy.
Conclusion:

Sepsis, it is a life-threatening clinical condition in the patient group with advanced age and multiple morbidity. Our case is a diabetic patient who applied to the emergency department with hypotension and tachypnea. In this case, sepsis is the most likely diagnosis cause hemodynamic disturbances, except in diabetic acute emergencies. In patients with suspected sepsis, hydration should be started with MAP>65 to ensure tissue perfusion, and if necessary, positive inotropic support should be provided. Although the focus of infection in the urine and lungs of our patient was not detected at the first admission, the source of intra-abdominal infection was sought due to the high inflammatory tests, and liver abscess was found. With this case, we wanted to emphasize the importance of time and awareness in the management of sepsis, and that sepsis should be evaluated in the differential diagnosis of every patient who presented to the emergency department with a poor general condition and hemodynamics.

References:

1) Bone CR, Grodzin CJ, halk AR. Sepsis: A New Hypothesis for Pathogenesis of the Disease Process. Chest 1997;112: 235-43
2) Luce JM. Pathogenesis and Management of Septic Shock. Chest 1987; 91 (6):883-88)

3) Surviving sepsis campaign: international guidelines for management of sepsis and septic shock 2021. Intensive Care Med, 2021 Nov;47(11):1181-1247. doi: 10.1007/s00134-021-06506-y.

POSTER 9

The evaluation of home care services during Covid-19 pandemic

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Objectives:

This study aimed to evaluate the home care services during the Covid-19 pandemic.

Methods:

In this retrospective study, the home care services data of patients registered in our hospital home care unit was accesed through the patient information systems. The services provided from March 2020, when the WHO declared the coronavirus epidemic as a pandemic, until September 2021 were examined within the scope of this study. Medical services were evaluated in the performed eight groups including wound dressing, blood collection for examination, bladder catheterization, intramuscular (IM)- intravenous (IV)- subcutaneous (SC) injections, vaccine administration, nasogastric tube application, suture removal and enema application. Burn dressing applied 8 times was involved in the wound dressing group. All administrations made for the vaccine are coronavirus vaccines and were not included in the injection group and were examined separately under the vaccine group title. Educational practices, health board reports and physician reports were evaluated in the preclinical services category.

Results:

During the evaluated pandemic period, the total number of registered patients was 5868 when calculated monthly. The lowest number of registered patients was in January 2021 with 277, while the highest number of registered patients was in May 2020 with 370. The total number of visits to patients was 10980, 6282 in 2020 and 4698 in 2021 (min. May 2020, n=344, max. April 2020, n=800). The number of all medical services provided in the evaluated period was 5818. In the medical services category, the most frequently given service was wound dressing (n=2573). The least number of services provided was enema application (n=2). Blood collection procedure was performed 1398 times, bladder catheterization 1016 times, vaccine administration 360 times, nasogastric tube application 64 times and suture removal

31 times. Of a total of 374 injections, 23 were IV, 9 were SC, the remaining 342 were IM injections. In the preclinical services category educational practice on patient surveillance, nutrition, medical equipment care, Covid-19 pandemic and immunization was carried out at each patient visit (n=10980). The medical board report was issued 119 times, and the physician report 69 times.
Conclusion:
The present study showed that wound dressing is the most common medical service given to patients registered in the home care unit of our hospital in the evaluated pandemic period. It is important that the coronavirus vaccine administration is added to home care services.
Keywords: home care, Covid-19, pandemic

POSTER 10

Conn's Syndrome Presenting with Muscle Pain

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Keywords: myalgia, hypokalemia, Conn's Syndrome

Summary: Primary aldosteronism (PA); includes hypertension, hypokalemia, and low plasma renin. Conn's syndrome (aldosterone-producing adenoma) is a cause of PA that can be cured by unilateral adrenalectomy. Muscle paralysis may be observed due to hypokalemia. We planned to present a young case who presented with diffuse muscle pain and was diagnosed with primary hyperaldosteronism because of new onset hypertension.

Case: A 23-year-old male patient was admitted to our outpatient clinic due to diffuse muscle and joint pain. Blood pressure was measured as 160/100 mm/hg. Plasma K: 2.4 mmol/l. The patient, who had no history of chronic disease, was admitted to the service for further examination with a preliminary diagnosis of primary aldosteronism. Laboratory values: K:2.3mmol/l Na:141mmol/l d-vit:18.6 calcium:8.8mg/dl albumin:47.6g/l vitamin b12:283 creatinine kinase:231U/L pH in blood gas: 7.41 pco2:47.0 hco3:29.4 tsh:2.5 t4: 0.99. After potassium replacement, the renin aldosterone level was asked to the patient. It was found as renin:149.65 aldosterone:0.71. Etiological investigations were planned for new-onset hypertension. Findings consistent with renal artery stenosis were reported in renal artery Doppler ultrasonography. Computed tomography (CT) angiography for the

renal arteries was planned; It was reported as normal. 1 mg dexamethasone suppression test and metanephrine/normetanephrine in 24-hour urine were measured, it was within the normal range. CT with adrenal protocol was performed; the right adrenal gland is 21*31 mm in size at the junction of the trunk and medial leg, 22 HU in the precontrast series, 72 HU in the portal venous phase, 41 HU in the late phase; A lesion compatible with adenoma was reported with an absolute wash out of 62% and a relative washout of 42%. The patient was referred to an external center for the need for right adrenalectomy.

Conclusion: The importance of evaluating the anamnesis, examination and laboratory results together in the management of muscle pain, which is among the common complaints in the young patient group, is obvious in establishing the main diagnosis. It is recommended to measure blood pressure, monitor electrolyte values, and consider Conn's Syndrome in patients presenting with muscle pain.

POSTER 11

A case of ITP Relapsed After Inactive Covid-19 Vaccine

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Introduction: There are vaccines of different technologies developed to combat the infection caused by the SARS-Cov-2 agent. Inactivated vaccines that have been used for many viral diseases are generally well tolerated and safer in terms of side-effect profile. In this case, we planned to present a case of immune thrombocytopenia that relapsed after inactivated Covid-19 vaccine.

Case: A 60-year-old female patient was admitted to the emergency department with complaints of red eye, bleeding gums, petechiae on the trunk and legs. In the patient's anamnesis, the complaints started 6 days after the Covid-19 vaccine and he was diagnosed with immunothrombocytopenia 4 months ago in an external center; It was learned that after the corticosteroid was given at the time of diagnosis, she was

followed up without medication. . After she was admitted to the emergency room, she was followed up in the internal medicine service with the prediagnosis of post-Covid-19 immunothrombocytopenia relapse. In the peripheral smear of the patient whose blood plt was 2000mm3 at the time of admission, it was seen that the platelet count counted in each area was consistent with that in the blood. No signs of intracranial hemorrhage were observed in the brain tomography of the patient, which was requested in the emergency room admission. The patient was started on dexamethasone treatment at a dose of 40 mg/day. On the 4th day of the treatment, the platelet count was counted as 150000 mm3 in the peripheral smear of the patient whose plt was 132000mm3. During the follow-ups, the patient's complaints regressed and he was discharged with hematology outpatient control.

In conclusion, we think that inactivated vaccines against COVID-19 infection can trigger immunity against platelets. Physicians should seek a history of inactivated COVID-19 vaccines in patients with immune thrombocytopenia.

Keywords: covid-19, immune thrombocytopenia, inactivated vaccine

POSTER 12

A FATAL CASE OF LACTIC ACIDOSIS: METFORMIN INTOXICATION!

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Case: A 54-year-old female patient who has been using oral antidiabetic drugs for type 2 Diabetes Mellitus (DM) for 12 years; He was brought to the emergency with complaints of weakness, nausea, vomiting, and confusion. In the examination of the patient; His consciousness was sleepy, semi-oriented, semi-cooperative, blood pressure 95/55 mmHg, heart rate 118/min, oxygen saturation 92. No pathology was found in the brain tomography taken due to unconsciousness. As a result of the anamnesis taken from the relatives of the patient, it was learned that the patient took 25-30 metformin 1000 mg for suicidal purposes approximately 10 hours before his application to the emergency department. The patient was admitted to the adult intensive care unit. pH:7.22, PaO2:56 mmHg, PaCO2:39 mmHg, HCO3:18 mmol/l, anion gap:17, lactate:18.4 mg/dl, BUN:34 mg/dl, creatinine:1.8, ALT: 38 U/l, AST:48 U/l, LDH:496 U/l, Na:134 mmol/l, K:5.1 mmol/l, Cl:106 mmol/l. When the patient, who was oligoanuric and hypotensive, did not respond to fluid support, inotropic support

was started. Lactic acidosis due to metformin intoxication was considered in the patient and sodium bicarbonate infusion was started. The patient, whose lactic acidosis deepened, was intubated and connected to a mechanical ventilator due to the gradual decrease in oxygen saturation and partial oxygen pressure. Since the arterial blood gas measured 2 hours after the patient was intubated had pH: 7.15 and lactate 78.3 mg/dl, a central venous dialysis catheter was inserted and continuous veno-venous hemodiafiltration was planned. Sudden cardiac arrest developed at the 3rd hour of hemofiltration in the patient whose blood pressure did not increase despite dopamine and norepinephrine infusion, and resuscitation was started. The patient, who did not respond to the resuscitation, died.

Discussion: Metformin decreases lactate metabolism, increases lactate production in the liver, decreases glucose utilization and increases lactic acid secretion from hepatocytes (1). Metformin-induced lactic acidosis develops at high doses and in the case of renal failure (2). In addition to non-specific symptoms such as weakness, fatigue, symptoms accompanied by renal failure, hypotension, respiratory failure and cardiac arrhythmias may develop in patients (3). The main purpose of metformin intoxication is supportive treatment. Sodium bicarbonate infusion alone is not sufficient for the treatment of acidosis. Hemodialysis is recommended in the treatment of lactic acidosis (4). High-volume venovenous hemodiafiltration or hemodialysis reduces lactic acid formation by removing circulating metformin. If the patient cannot tolerate hemodialysis, hemofiltration is seen as a better option (5). In conclusion, lactic acidosis is a fatal complication of metformin poisoning. The most important and effective treatment is continuous venovenous hemodiafiltration with bicarbonate.

Key words: lactic acidosis, metformin, intoxication

1. Teale KF,Devine A,Stewart H,Harper NJ.The management of metformin overdose. Anaesthesia 1998;53(7):698-701.

2. Soderstrom J,Murray L,Daly FF,Little M.Toxicology case of the month: oral hypoglycaemic overdose.Emerg Med J 2006;23(7):565-7.

3. Spiller HA,Sawyer TS.Toxicology of oral antidiabetic medications.Am J Health Syst Pharm. 2006 May 15;63(10):929-38.

4. Berner B,Hummel KM,Strutz F,Ritzel U,Ramadori G,Hagenlocher S,et al.Metformin- associated lactic acidosis with acute renal failure in type 2 diabetes mellitus.Med Klin(Munich).2002 Feb 15;97(2):99-103.

5. Barrueto F, Meggs WJ, Barchman MJ. Clearance of metformin by hemofiltration in overdose. J Toxicol Clin Toxicol 2002;40(2):177-80.

POSTER 13

Factor That Can Come Out From Under Every Stone: SARS-CoV-2

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About 3% of mushroom species are known to be poisonous. In cases of mushroom intoxication, gastrointestinal (GIS) symptoms are seen in the foreground. In addition, depending on the type, hallucinations, organ failure and death can be seen. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the viral agent considered by WHO to have reached pandemic levels. Most of the patients present with respiratory symptoms (22-82%). 11-24% may present with gastrointestinal symptoms such as nausea, vomiting, abdominal pain and diarrhea. The patient who presented with nausea and vomiting after eating pickled mushrooms was hospitalized with a preliminary diagnosis of mushroom intoxication in 2 cases. The cases were accepted as SARS-CoV-2 because the SARS-CoV-2 PCR test was positive one day later and there were no clinical and laboratory findings of fungal intoxication. We planned to present these cases in order to emphasize the need not to ignore SAR CoV-2 during the pandemic period and to draw attention to the potential risk of transmission due to late results of PCR tests.

Cases: A 51-year-old female and a 52-year-old male patient applied to the emergency department with nausea and vomiting that developed after eating pickled mushrooms 12 hours ago. The type of mushroom they ate could not be determined. He was interned to the gastroenterology service for 24-hour observation. There was no pathological finding in the physical examination. Laboratory values; for female patient, Hb:12.2 g/dl,WBC:6.06 K/uL, Lym:1.94K/uL, Plt:231000K/uL ,AST:21 u/L, ALT:9 u/L, CRP:1.7mg/l, Urea:35 mg/dl, Creatinine:.62 mg/dl, Direct Biluribin:0.21mg/dl, Total Biluribin:0.77 mg/dl; for the male patient; Hb:12.2 g/dl ,WBC:6.06 K/uL, Lym:1.94 K/uL, Plt: 231000 K/uL, AST:21 U/L ALT:14 U/L, CRP:3.1 mg/L, Urea:42mg/dl, Creatinine:0.82mg/dl, Direct Biluribin:0.18mg/dl, Total Biluribin:0.43 mg/dl. Routine PCR testing was requested for patients who did not

have a history of recent contact or complaints compatible with upper respiratory tract infection. The next day, the results of both patients were positive. Due to their good general condition, they were discharged to receive treatment at home after informing the filation team.

Conclusion: The SARS-CoV-2 pandemic is a new and tiring picture. An important step in preventing the disease is to detect and isolate the infected patient early. Although it mostly presents with respiratory tract symptomatology, it should also be kept in mind in the diagnosis in cases presenting with nonspecific gastrointestinal complaints. False negativity of the PCR test and late results, as in our cases, are among the factors that increase the risk of transmission.

Keyword: SARS-CoV-2, mushroom poisoning, nausea, vomiting.

POSTER 14

Anti-Phospholipid Syndrome Presenting with Acute Pancreatitis

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Acute pancreatitis; is an inflammation of the pancreas with clinical, morphological and functional changes. Etiology includes metabolic, mechanical, vascular and infective causes. The prominent symptom is abdominal pain in 80-85% of cases. Antiphospholipid syndrome (APS) is an autoimmune disorder associated with antiphospholipid (aPL) antibody-mediated thrombosis and inflammation. Venous thromboembolism and stroke are seen in APS. Pulmonary thromboembolism (PTE) and/or isolated deep vein thrombosis (DVT) are frequently observed. One of the most common vascular complications of acute pancreatitis is portal venous thrombosis (PVT); complete or partial inhibition blood flow due to thrombus formed in the portal vein .APS is among the causes in adults with PVT that develops without underlying diseases such as cancer and cirrhosis. We wanted to present a case of APS diagnosed after admission to the emergency department with acute pancreatitis clinic.

Case: A 51-year-old male patient with a diagnosis of ischemic cerebrovascular and coronary artery disease was admitted to the emergency department with abdominal pain in the form of a back lap for 1 month, and amylase: 400 u/l lipase: 900 u/l, with a preliminary diagnosis of acute pancreatitis and admitted to gastroenterology service. Abdominal ultrasonography of the patient, who had no history of newly started drug or alcohol use, showed thrombus filling the lumen in the right portal vein and splenomegaly. Other investigations were planned for the etiology of PVT. Laboratory results at application: Hb: 13.6 g/dl, Lymphocyte: 1.67 k/IU, plt: 90.000 k/IU, WBC: 5.79 k/IU, CRP: 2 mg/l Triglyceride: 115 mg/dl, LDL: 69.1 mg/dl, HDL: 22.90 mg/dl, VLDL: 23 mg/dl, Total Cholesterol: 115 mg/dl, Total Biluribin: 0.78 mg/dl, Direct bilirubin: 0.34 mg /dl resulted in sedimentation:15. In the MRCP examination of the patient, no dilatation was observed in the intra and extrahepatic bile ducts, and the pancreatic duct could not be evaluated clearly due to variation. The patient, whose abdominal pain regressed, was discharged after treatment. His pre-planned examinations during the outpatient clinic control; ANA++++ homogeneous pattern, C3 and C4: normal, Anti cardiolipin IgM: Negative IgG: 160 positive, Antibeta 2 glycoprotein 1 Ig M: Negative Ig G: 78 Positive; Thrombophilia panel resulted as F2 Prothrombin: Heterozygous, PAI Serpine 1: Homozygous, MTHR: Heterozygous. It was accepted as Antiphospholipid Antibody Syndrome (APS) by rheumatology and hydroxychloroquine was added to her treatment.

Conclusion: Abdominal pain is a nonspecific symptom encountered in the clinic almost every day. The patient's anamnesis, system examination, radiological and laboratory results should be evaluated as a whole; rare situations that may cause each other should be considered.

Keywords: acute pancreatitis, antiphospholipid syndrome, portal venous thrombosis

SÖZEL BİLDİRİLER

SÖZEL 1

DIAGNOSTIC VALUE OF ANTICARDIOLIPIN ANTIBODIES IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

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ABSTRACT

Introduction and aim: Anticardiolipin antibodies have been associated with thrombus formation. It has been reported that antibodies can bind to platelet phospholipids, activate platelets, and inhibit prostacyclin production in the endothelium, leading to thrombus formation ,In our study, we aimed to evaluate the relationship between acute myocardial infarction, a thrombotic event, and anticardiolipin antibodies.
Methods: Our study included 22 patients with acute myocardial infarction and 10 healthy individuals under the age of 63 who were hospitalized in the Coronary Intensive Care Unit.
Results:control group were compared, no statistically significant difference was found between the groups When the anticardiolipin IgM and IgG values of the patients with infarction and the ($p > 0.05$). Conclusion:Our findings suggest that anticardiolipin antibodies are not independent risk factors for myocardial infarction.
Key word: Acute myocard infraktuse, Anticardiolipin IgM, AnticradiolipinIgG

INTRODUCTION

Coronary artery diseases are the leading cause of death in the world. The latest techniques related to the pathophysiology of acute infarction, exemplary and immunological causes come to the fore in coagulation.

Anticardiolipin antibodies are a subgroup of antiphospholipid antibodies. They are negatively charged or neutral phospholipids. They are polyclonal immunoglobulins that circulate in the serum and contain IgG, IgM, IgA subgroups (1,2).

Recent research has predicted a relationship between anticardiolipin antibodies and coronary artery disease. It is considered as an indicator of recurrent cardiovascular events, especially in young patients with myocardial infarction(3,4). The clinical significance of APA in patients with myocardial infarction is still not fully explained.

Anticardiolipin antibodies have been implicated in thrombus formation. Antibodies, by activating platelet phospholipids, can stimulate the production of prostacyclin in the endothelium, leading to thrombus formation(1,3).

We aimed to evaluate acute myocardial infarction, a thrombotic event, with anticardiolipin antibodies.

MATERİALS AND METHODS

Our study included 22 patients with comprehensive myocardial infarction aged 63 years and 10 simple cases admitted to the Coronary Intensive Care Unit. Acute myocardial infarction was diagnosed by clinical findings, electrocardiographic changes and cardiac evaluation.

Demographic data such as patient age, routine biochemistry and anticardiolipin antibody IgG and IgMs were separated. They were evaluated statistically.

Statistical analysis

Statistical analysis was performed using the SPSS version 20.0 (IBM Corp., Armonk, NY, USA). Descriptive data were expressed in mean ± standard deviation (SD) for continuous variables and in number and percentage (%) for categorical variables. An independent sample t-test was performed for the comparison of parametric data between two independent groups. The Mann-Whitney U test was used for the comparison of non-normally distributed variables. Logistic regression analyzes were performed to examine the independent variables affecting acute myocardial infarction. A p value of <0.05 was considered statistically significant.

RESULTS

Baseline demographic and laboratory data of the study groups are shown in Table 1. There was no statistically significant difference in the age and sex of the patient groups. Patients with acute myocardial infarction had no difference in median serum Antikardiyolipin IgM and Antikardiyolipin IgG levels compared to the healthy group.(P>0.05). There was no significant difference in Anticardiolipin IgM and IgG logistic regression between the acute myocardial infarction group and the healthy group (p>0.05) (Table 2).

Table1: Demographic and laboratory data of acute myocardial infarction and control group

	Control grubu n: 10	Acute MI grubu n:22	P value
Age(year)	45±8,6	50,7±7,9	0,890
Gender	6/4	19/3	0,150a
Anticardiyolipin IgM(u/ml)	6,6(3,0 -9,8)	6,18(3,2-8,2)	0,542b
Anticardiyolipin IgG(u/ml)	18,45(13-53)	8,1(3,2-8,1)	0,807b

Table2- Logistic regression test for acute myocardial infarction

	B	Sig.	Exp(B)	95% C.I.for EXP(B)	
				Lower	Upper
Gender	1,343	0,282	3,831	0,331	44,316
Age(year)	0,122	0,067	1,130	0,991	1,288
Anticardiyolipin IgM(u/ml)	-0,165	0,198	0,848	0,660	1,090
Anticardiyolipin IgG(u/ml)	0,025	0,207	1,025	0,986	1,065

DİSCUSSİON

It has been found that antiphospholipid antibodies, especially elevated IgG, are associated with neurological disorders such as thrombocytopenia, venous and arterial thrombosis, cerebral and ocular ischemia (1). In our study, we investigated the relationship between anticardiolipin antibodies and acute myocardial infarction. In conclusion, we found that anticardiolipin antibodies were not associated with acute myocardial infarction. The reason for this may be that acute myocardial infarction pathogenesis is due to multifactorial mechanisms, but autoimmunity may not be involved in the pathogenesis of myocardial infarction.

Considering the studies in the literature, Hamsten et al. reported that high titers of anticardiolipin antibodies are not a risk factor for myocardial infarction at a young age, but are an indicator for subsequent thrombotic events, in line with our study (3). Since our study was a cross-sectional study, we cannot say this as our study limitation. However, unlike Hamsten, Phadke et al. found that an increase in anticardiolipin antibody concentration at 12-month follow-up did not predict recurrent myocardial infarction and thromboembolism(5). Mutlu et al. found that anticardiolipin IgG was increased in rheumatic heart diseases, ischemic heart patients and acute myocardial infarction cases(6).

Our results and literature information show that anticardiolipin antibodies and autoimmunity are not a risk factor for patients with ischemic heart disease. randomized controlled prospective studies are needed.

REFERENCES

1-Harris, E. N.,Chan,J.K.H.,Asherson,R.A. et al. Thrombosis, recurrent fetal loss, and thrombocytopenia. Predictive value of the anticardiolipin antibody test. Arch Intern. Med. 1986; 146:2153-2156.

2-De caterina, R., D'ascanio, A., Marcone ,A.et al. Prevalance of anticardiolipin antibodies in coronary arter disease. The Am Jour of Cardiol. 1990, 65:922-923.

3-Hamsten, A., Norberg, R., Bjork, H.M. et al: Antibodies to cardiolipin in young survivors of myocardial infarction: An association with recurrent cardiovalscular events, Lancet; 1986; 113:115

4-Lellouche F, Martinuzzo M, Said P, et al: Imbalance of thromboxane/prostacyclin biosynthesis in patients with lupus anticoagulant. Blo od 78:2894-9, 1991.

5-Phadke, K. V., Phillips RA, et al: Anticardiolipin antibodies in ischemic heart disease: Marker or Myth? Br.Heart J 1993, 69(5):391-94.

6-Mutlu H, Demircioglu C, Yazıcıoğlu N, ve ark. Degişik kalp hastalıklarında serum kardiolipin antikorları . Tip Fak. Mecm, 53:11-18 (1990).

SÖZEL 2

The Role Of Bone Marrow Biopsy In Elderly Patients With Mild Anemia

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INTRODUCTION: Bone marrow aspiration (BMA) and bone marrow biopsy (BMBx) are often required in cases of Unexplained Anemia (UEA). Although KiAsp and Bx are required in UEA cases, considering the complications of the procedure and current hematology guidelines recommend that Hb<10 g/dL level be defined as true cytopenia and examined.
METHODS: Hb 10-12 g/dL (grade 1 anemia) physical examination and examinations of 40 patients over 50 years of age with UEA were evaluated in detail and evaluated with BMB and BmBx. The data were analyzed and bone marrow storage iron was found in patients without dysplasia examined.
RESULTS: When the case results we evaluated for UEA were examined, no malignant hematological or malignant non-hematological disease was found. The results were consistent with the current literature and NHANES 3 results, and in this group of patients, Chronic Disease Anemia was the first 62.5% and Iron Deficiency Anemia was the second most common 37.5%. In patients with ferritin level above 100 ng/mL, the HR was 73.3%. In our study, in which patients with bistopenia/pancytopenia were excluded from the study, there were no patients diagnosed with MDS and AA.
DISCUSSION AND CONCLUSION: Hb<10 g/dL as significant cytopenia, and it is understood that the possible delay in the diagnosis of MDS and AA cases will not have a negative impact on the health and survival of the patient in the absence of BMA and BMBx in grade 1 anemia with Hb>10 g/dL.
Although current guidelines emphasize that BMA and BMBx should be performed in UEA cases, Hb <10 g/dL is accepted as true cytopenia. We concluded that it is not an absolute necessity to perform BMA and BMBx examination in mild isolated anemia cases (Hb 10-12 g/dL) through detailed physical examination, detailed system interrogation, imaging methods, and laboratory laboratory examinations including peripheral smear.

Keywords: elderly age, grade 1 anemia, unexplained anemia, bone marrow aspiration, bone marrow biopsy

INTRODUCTION

Bone Marrow Aspiration (BMA) and Bone Marrow Biopsy (BMBx) are often required in cases of Unexplained Anemia (UEA). It is the only diagnostic method, especially

for diagnosis of Myelodysplastic Syndrome (MDS) and Aplastic Anemia (AA). However, these invasive procedures can cause bleeding at the biopsy site, long-term pain, foot drop, and rarely osteomyelitis.

In the results of our study, which evaluated 40 elderly patients with Hb 10-12 g/dL using BMA and BMBx, no malignant hematological or malignant non-hematological disease was found. The results were consistent with the current literature, and chronic disease anemia was the first cause and iron deficiency anemia was the second most common cause in this group of patients. In our study, which excluded patients with bistopenia/pancytopenia, there were no patients diagnosed with MDS and AA. The World Health Organization (WHO) accepts Hb<10 g/dL as significant cytopenia, and it is understood that the delay in the diagnosis of MDS and AA cases in the absence of BMA and BMBx will not have a negative impact on the health and survival of patients with mild anemia and Hb>10 g/dL.

Although current guidelines emphasize that BMA and BMBx should be performed in UEA cases; we concluded that it is not an absolute necessity to perform BMA and BMBx examination in mild isolated anemia cases (Hb 10-12 g/dL). Detailed physical examination, detailed system interrogation, imaging methods and laboratory examinations including peripheral smear may be sufficient. However, it is obvious that our results should be evaluated with larger case studies.

The diagnosis of anemia is a serum hemoglobin value below 13 g/dL in men and 12 g/dL in women according to the WHO criteria (1,2,3). Anemia is an important problem in elderly patients. Although the decrease in hematocrit makes it easier to diagnose anemia with chronic inflammation, nutritional deficiency, and comorbid diseases, there are patients in the geriatric population for whom anemia is difficult to diagnose. There is evidence to suggest EPO resistance in hematopoietic stem cells with aging, with elevation of EPO levels in elderly, nonanemic patients due to resistance. Aging causes an increase in proinflammatory cytokine expression and is thought to play a role in insensitivity to EPO. Its effect on hematopoietic stem cells to reduce inflammation, EPO insensitivity and erythropoiesis is thought to be the underlying pathophysiology of anemia in elderly patients. With the aging of society and the increase in the elderly population, diseases of the elderly have become more important and more controversial (4). Despite advanced research and examinations, the cause of anemia cannot be explained in one third of the elderly, and this condition is called UEA. This condition is characterized by hypoproliferative, normocytic and low reticulocyte counts. Although EPO is expected to be high secondary to anemia, it is low in this group of patients. Low testosterone levels, chronic inflammation, malnutrition, and nascent myelodysplasia are contributing factors. No specific treatment strategy was established for UEA, but its association with a wide range of adverse outcomes, including impaired quality of life, physical

function, and mortality in this patient group, warrants clinical investigations focusing on basic and clinical aspects (5).

The Nutritional Health and Nutrition Examination Survey (NHANES III) (6) classified iron deficiency anemia together with other nutritional anemia for 3rd world countries and it was associated with chronic blood loss in North America and Western Europe. In the NHANES II study, the prevalence of anemia in patients aged above 65 is around 9.5%, and this percentage increases with age. Incidence of anemia is higher in elderly men compared to elderly women. However, if the definition of anemia is considered to be hemoglobin level of <13 g/dL, this difference between the sexes disappears. MDS's are an important cause of anemia in the elderly with a minimum prevalence of 4%. In home visits to elderly patients, nutritional deficiency was found in 36.4%, Anemia of Chronic Disease (ACD) in 13.6%, MDS in 9.1%, and UEA in 40.9% (7). Anemia is a risk factor that predicts all-cause mortality and cardiovascular mortality in the general population, regardless of gender, age, and cardiovascular disease history (8). UEA is one of the indications for bone marrow examination that requires an interventional procedure (9,10).

MATERIAL-METHOD

The study was a retrospective-cross-sectional study. Forty patients who were examined for anemia in hematology clinics between March 2016 and October 2016, who were 50 years old and over and had bone marrow biopsy were included in the study. The diagnosis of anemia was made with the serum hemoglobin valuable low 13 g/dL in men and below 12 g/dL in women according to the criteria of the WHO (1). Reticulocyte percent age and peripheral smears were evaluated for patients with anemia. In those with serum ferritin level lower than 15 ng/mL, the presence of at least one of the following criteria was considered iron deficiency: serum iron level below 50 pg/dL and/or serum binding capacity above 350 pg/dL and/or transferrin saturation below 20%. Those with iron deficiency and anemia according to WHO criteria were diagnosed with "Iron Deficiency Anemia (IDA)". In patients with chronic diseases according to history, physical examination and laboratory values, the presence of anemia along with at least one of the following was considered a case of ACD: serum ferritin level above 100 ng/mL, along with serum iron level of 50 pg/dL and/or iron binding capacity of 350 pg/dL and/or transferring saturation above 20%. If anemia was not classified by any of the secritaria, it was accepted as "UEA".

Cases with leukopenia (<4000/μL) and/or thrombocytopenia (<150,000/μL) in addition to anemia on their hemogram were not included in the study. Patients with dysplasia findings in peripheral blood analysis and with a Mean Corpuscular Volume (MCV) >100fL were also excluded from the study. Serum immunoglobulin levels and serum protein electrophoresis were measured in all patients. Patients with M protein detected on serum protein electrophoresis were excluded from the study.

As seen in the printed pathology reports in our hospital, storage iron was valuated in 5 groups as (0,+ 1,+ 2,+ 3,+ 4) according to values in the biopsy reports of the patients. According to this evaluation, those with storage iron 0 or +1 were accepted as IDA. Those with storage iron + 2, + 3, and + 4 were considered to have sufficient storage iron. In order to consider dysplasia in bone marrow examination, more than 10% of the cells counted in each cell line should have dysplasia.

STATISTICAL METHODS

The Number Cruncher Statistical System (NCSS) 2007 (Kaysville, Utah, USA) program wasused for statistical analysis. While evaluating the study data, in addition to descriptive statistical methods (mean, standard deviation, median, frequency, ratio, minimum, maximum), the Mann Whitney U test was used for comparison of parameters that did not show normal distribution of quantitative data. For comparison of qualitative data, Pearson Chi-Square test, Fisher-Freeman-Halton test and Fisher's Exact test were used. Significance was evaluated at $p < 0.01$ and $p < 0.05$ levels.

RESULTS

The study was conducted between March 2016 and October 2016 in the hematology clinic with a total of 40 patients, 77.5% (n=31) female and 22.5% (n=9) male. The ages of the cases varied between 50 and 88 years, with mean age of 63.78±10.00 years.

Table 1: Hypertension, Presence of Diabetes and Distribution of Diagnoses

Hypertension; n (%)	None	14 (35.0)
	Present	26 (65.0)
Diabetes; n (%)	None	23 (57.5)
	Present	17 (42.5)
Diagnosis; n (%)	IDA	15 (37.5)
	ACD	25 (62.5)

Hypertension was present in 65.0% (n=26) of the cases and diabetes was present in 42.5% (n=17) of the cases. When the diagnoses of the cases are evaluated, 37.5% (n=15) had IDA and 62.52% (n=25) had ACD.

Table 2: Distribution of Ferritin Levels (ml/ng)

Ferritin(ml/ng)	Min-Max. (Median)	13-624 (61.5)
	Mean±Sd	127.14±140.63
Ferritin level; n (%)	<60	18 (45.0)
	60-100	7 (17.5)
	>100	15 (37.5)

Ferritin measurements of the cases ranged from 13 to 624 ml/ng, with mean of 127.14 ± 140.63 ml/ng. The ferritin levels of 45.0% (n=18) were below 60 ml/ng, 17.5% (n=7) were in the range of 60-100 ml/ng, and 37.5% (n=15) were above 100 ml/ng.

Table 3: Evaluation of Cases Based on Age (Cut-off point 65)

	Age (years)		
	<65 year (n=23)	≥65 year (n=17)	
	n (%)	n(%)	p
Diagnosis IDA	10 (43.5)	5 (29.4)	0.364
ACD	13 (56.5)	12 (70.6)	

Pearson Chi-Square Test

Of the patients under 65 years of age, 43.5% (n=10) were diagnosed with IDA and 56.5% (n=13) of them were diagnosed with ACD. Of those aged 65 and over, 29.4% (n=5) were diagnosed with IDA and 70.6% (n=12) with ACD. No statistically significant difference was found between the diagnoses of the cases according to age ($p=0.364$; $p>0.05$).

Table 4: Evaluation of theCasesBased on Hypertension

		Hypertension		
		None (n=14)	Present (n=26)	
		n(%)	n(%)	p
Diagnosis	IDA	4 (28.6)	11 (42.3)	0.392
	ACD	10 (71.4)	15 (57.7)	

PearsonChi-Square Test

Of the patients without hypertension, 28.6% (n=4) were diagnosed with IDA and 71.4% (n=10) with ACD. Of the patients with hypertension, 42.3% (n = 11) were diagnosed with IDA and 57.7% (n=15) were diagnosed with ACD. No statistically significant difference was found between the diagnoses of the cases according to the presence of hypertension (p=0.392; p>0.05).

Table 5: Evaluation of the Cases Based on Diabetes Mellitus

		Diabetes Mellitus		
		None (n=23)	Present (n=17)	
		n(%)	n(%)	p
Diagnosis	IDA	11 (47.6)	4 (23.5)	0.117
	ACD	12 (52.2)	13 (76.5)	

Pearson Chi-Square Test

Of the patients without Diabetes Mellitus (DM), 47.6% (n=11) were diagnosed with IDA, 52.2% (n=12) of them were diagnosed with ACD. Of the patients with DM, 23.5% (n=4) were diagnosed with IDA and 76.5% (n=13) were diagnosed with ACD. No statistically significant difference was found between the diagnoses of the cases according to the presence of DM (p=0.117; p>0.05).

Table 6: Evaluation of Cases Based on Ferritin Levels

		Ferritin(			
		<60 (n=18)	60-100 (n=7)	>100 (n=15)	
		n (%)	n (%)	n (%)	p
Diagnosis	IDA	10 (55.6)	1 (14.3)	4 (26.7)	0.122
	ACD	8 (44.4)	6 (85.7)	11 (73.3)	

Fisher-Freeman-Halton Test

Of the cases with ferritin level below 60 ml/ng, 55.6% (n=10) were diagnosed with IDA and 44.4% (n=8) were diagnosed with ACD. Of the cases with ferritin levels of 60-100 ml/ng, 14.3% (n=1) were diagnosed with IDA and 85.7% (n=6) were diagnosed with ACD. Of the cases with ferritin levels above 100 ml/ng, 26.7% (n=4) were diagnosed with IDA and 73.3% (n=11) was diagnosed with ACD. No statistically significant difference was found between the diagnoses of the cases according to ferritin levels (p=0.122; p>0.05).

DISCUSSION

The diagnosis of anemia is a serum hemoglobin value below 13 g/dL in men and 12 g/dL in women according to the WHO criteria (1,2,3). Anemia is an entity seen in all age groups and its etiology can often be explained. Incidence increases with age, and etiology varies with age. While nutritional causes such as IDA are in first place under the age of 40, anemia of ACD ranks first for those the age of 60 and above. Similarly, the frequency of UEA increases with age.

BMA and BMBx examination are often required in UEA cases. The only method to diagnose MDS and AA is BMA and BMBx. However, this method is an invasive procedure and may lead to some complications. Examples of more serious complications include bleeding at the biopsy location, prolonged pain, foot drop and rarely osteomyelitis. Due to the fact that it is an invasive procedure and involves some possible risks, it is necessary to determine the indications for BMA and BMBx accurately and precisely.

Joosten et al. reported the reasons for anemia in the elderly as ACD 34%, IDA 15%, vitamin B12 and folic acid deficiency anemia 5.6%, UEA 17%, posthemorrhagic anemia 7.3%, chronic leukemia or lymphoma 5.1% and MDS and acute leukemia 5.6% (9). In the study by Chernetsky et al., the most common cause was ACD (65%), chronic kidney disease for 13.2%, nutritional deficiency (iron, vitamin B12, folate) for 4%, and the cause was not found for 15.9% (11). In the study conducted by Akad et al., they found that the ACD rate was 37%, iron deficiency anemia was 17% and B12 deficiency was 26%. In the study, they found that B12 deficiency was quite high compared to the literature. However, another interesting result is that no patients with MDS and other hematological malignancies were found in this study (12).

According to the National Health and Nutrition Examination Survey (NHANES) data, the prevalence of anemia in the population aged 65 and over in the United States is 10.6% (10.2% in women and 11.0% in men). The most common causes are UEA (33.6%), renal failure (19.7%) and IDA (16.6%). In this study, peripheral smear and bone marrow examination were performed in patients with macrocytosis or leucopenia and thrombocytopenia, and the frequency of MDS was found to be 5.8%. However, although it is known that the frequency of MDS increases with age, it did not comprise a significant proportion of UEA cases due to the low number of cases with macrocytic anemia in the study. Again, in this study, nutritional anemia caused 34% of all anemias, while non-nutritional anemias comprised 66%. As can be seen from this study, 65-70% of cases with anemia can be diagnosed without bone marrow examination in cases with anemia aged 65 years and older. Another feature of this study is that there was no peripheral smear examination because it was a long-term observational study.

In the study by Gil Cliquet et al. of the Brazilian population, they found the prevalence of anemia at the age of 60 and over was 36.5%. In this study, while the most common cause was ACD, the second most common cause was nutritional reasons such as IDA, and then UEA. Similar to the NHANES III data, they stated that the frequency of MDS increased with age, so MDS contributed to a high proportion of UEA cases (13).

Since our study is not a prevalence study, we do not have data about the frequency of anemia. However, no malignant hematological or non-hematological disease was

found in the results of BMA and BMBx performed in patients in our study who were examined in hematological detail. Our results are also consistent with current literature data. For example, in the NHANES III data, the most common cause appears to be ACD, while the second most common cause is IDA. In our study, the most common cause was ACD, and the second most common cause was IDA. Considering the NHANES III data, the frequency of MDS appears to be 5.8%. It is note worthy that there was no MDS diagnosis in our study. The reason for this is that BMA and BMBx were performed on patients with leukopenia (<4000/μL), thrombocytopenia (<150,000/μL) and macrocytosis (MCV> 100 fL) in the NHANES III data. However, cases with leucopenia and/or thrombocytopenia were not included in our study.

In the WHO classification, the hemoglobin level in mild anemia (grade-1) was defined as between 9.5-12 g/dL. However, in hematology guidelines, it is emphasized that the hemoglobin value should be below 10 g/dL in order to accept anemia as significant cytopenia for both MDS and AA (14). Based on this, in cases of mild anemia with a hemoglobin value above 10 g/dL, the possible delay in the diagnosis of MDS or AA cases if BMA and BMBx are not performed will not have a negative effect on the patient's health.

In our study, no significant relationship was found between age and anemia etiology. However, while IDA is more common under the age of 60, the increase in the frequency of ACD over the age of 60 is a consistent and expected finding in the literature. This is because as age increases, the frequency of chronic diseases increases or the long-term consequences of existing chronic diseases emerge.

An interesting conclusion in our results is the correlation between ferritin levels and the etiology of anemia. As expected, the frequency of IDA is significantly higher in cases with ferritin level below 60 ml/ng, while the frequency of ACD increases and the frequency of IDA decreases significantly in those with ferritin of 60-100 ml/ng. However, an increase in the frequency of IDA in cases with ferritin levels above 100 ml/ng is not an expected finding. These results may be due to the patient profile. Because of the low number of cases, percent age figures can easily change. In addition, comorbid IDA or the effects of drugs used for anemia are other causes.

Although the current guidelines emphasize the necessity of performing BMA and BMBx in UEA cases, we concluded that it is not an absolute necessity to carry out BMA and BMBx examination in mild isolated anemia cases (hb: 10-12 g/dL) where detailed physical examination, detailed system inquiry, imaging methods and

laboratory examinations including peripheral smear can be sufficient. The low number of cases in our study is an important limitation. For this reason, it is obvious that our results should be evaluated with studies with a larger number of cases. Likewise, patients with peripheral smear findings showing dysplasia were not included in the study. For these reasons, no MDS case was encountered in our study.

LIMITATİON OF STUDY

Since our study is not a prevalence study, we do not have data about the frequency of anemia. This situation has been a limitation for our study.

CONCLUSION

The diagnosis of anemia is a serum hemoglobin value below 13 g/dL in men and 12 g/dL in women according to the WHO criteria (1,2,3). Anemia is an entity seen in all age groups and its etiology can often be explained. Incidence increases with age, and etiology varies with age. While nutritional causes such as IDA are in the first place under the age of 40, ACD ranks first at the age of 60 and above. Similarly, the frequency of UEA increases with age.

BMA and BMBx examination are often required in UEA cases. The only method for diagnosing MDS and AA is BMA and BMBx. However, this method is an invasive procedure and may lead to some complications. Examples of more serious complications include biopsy site bleeding, prolonged pain, foot drop and rarely osteomyelitis. Due to the fact that it is an invasive procedure and involves some possible risks, it is necessary to determine the indications of BMA and BMBx accurately and precisely.

In our study, no malignant hematological or non-hematological disease was found in the results of BMA and BMBx performed in patients who were examined in hematological detail. Our results are also consistent with current literature data. For example, in the NHANES III data, the most common cause appears to be ACD, while the second most common cause is IDA. In our study, the most common cause was

ACD, and the second most common cause was IDA. Considering the NHANES III data, the frequency of MDS appears to be 5.8%. It is noteworthy that there was no MDS diagnosis in our study. (14) The reason for this is that BMA and BMBx were performed on patients with leukopenia (<4000/μL), thrombocytopenia (<150,000/μL) and macrocytosis (MCV>100 fL) in the NHANES III data. However, cases with leucopenia and/or thrombocytopenia were not included in our study. Likewise, patients with peripheral smear findings showing dysplasia were not included in the study. For these reasons, no MDS case was encountered in our study.

SÖZEL 3

A Rare Cause in the Differential Diagnosis of Acute Abdomen

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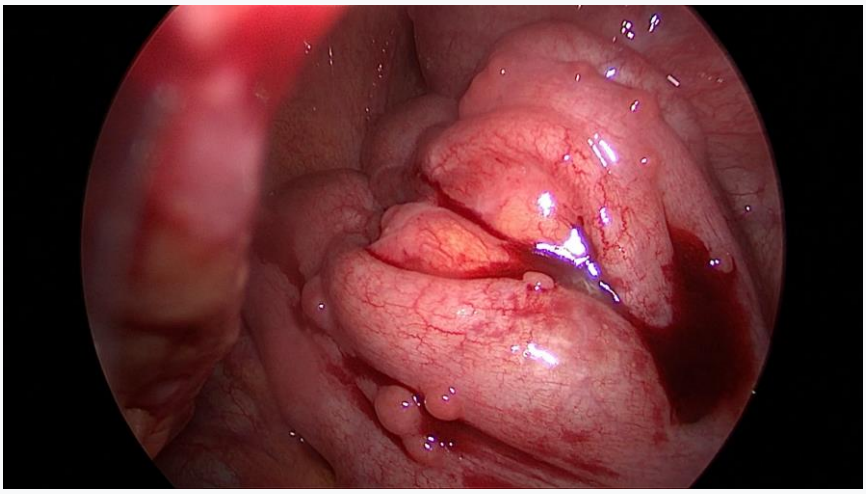
Objective: Acute abdomen, which is one of the frequent reasons for admission to the emergency department, is among the frequent causes of abdominal pain, which should be differentiated from many diseases and the need for urgent surgery should be revealed. At this point, rare causes of acute abdomen that can be easily missed should also be kept in mind.
Method: A 22-year-old patient who came to our country for education from Kenya, who applied to many centers and was diagnosed with acute appendicitis after being evaluated in emergency services, applied to our department with the same complaints. Examination findings were consistent with acute appendicitis, and USG and abdominal CT results were interpreted as acute appendicitis. The patient with high white blood cell and CRP values was taken to emergency operation with the preliminary diagnosis of acute appendicitis, and laparoscopic appendectomy was planned.

Results: It was observed that the patient, who was explored laparoscopically, had dense omental adhesions between the liver and the abdominal wall, between the small intestines and the abdominal wall, and between themselves, and implants with the largest 1 centimeter in the omental surfaces and meso (Picture 1). The appendix was not observed. In this case, an open operation was performed with an upper-

lower midline incision with the umbilicus rounded. Adhesions were removed, it was seen that the appendix had a retroperitoneal extension and a normal appearance. Appendectomy was performed, biopsies were taken from the implants and the operation was terminated. In the pathological examination, necrotizing granulomatous inflammation was observed in the appendix wall, especially in the subserosa and meso, fat from the meso and serosa, and necrotizing granulomatous inflammation in the connective tissues, and the findings were reported as may be due to tuberculosis or yersiniosis. After the patient was discharged from the hospital, antituberculosis treatment was started and he recovered well in the follow-ups.



Picture 1. Intra-abdominal adhesions and implants

Conclusion: Due to the sudden onset of severe abdominal pain, there are frequent applications to the emergency services, and the need for rapid diagnosis and underlying surgery need should be revealed. Since the spectrum of diseases causing acute abdomen is very wide, rare non-surgical causes such as tuberculosis peritonitis should be taken into consideration as well as the common causes of this picture.

Keywords: Tuberculous peritonitis, need for surgery, miliary granuloma

SÖZEL 4

Determining the Attitudes of Individuals in the Community towards Vaccine Applications and their Attitudes After the Covid-19 Pandemic

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Background: The concept of anti-vaccine is as old as vaccination. Despite this, many individuals who were anti-vaccine or indecisive in the past were expecting a vaccine for this disease.

Research Questions

1. What is the perspective of individuals with and without COVID-19 against COVID-19 vaccine applications?
2. Do individuals with chronic diseases increase the rate of vaccination?

Objectives: The concept of anti-vaccination is as old as vaccination. However, during the pandemic process, many individuals have come to expect a vaccine for this disease. This study was carried out to examine the attitudes of individuals in the community towards vaccine applications and their attitudes after the Covid-19 epidemic.

Method: A sample of 509 volunteers was formed from the population of uncertain size using the random sampling method. The data were transformed into online questionnaires of socio-demographic characteristics form and anti-vaccine scale and delivered to individuals via social media. Cronbach's alpha for internal consistency was 0.92. For variable analysis, t-test, Kruskal-Wallis tests, percentile, mean and standard deviation evaluations were performed according to whether they were parametric or non-parametric.

Findings: Considering the reasons for not getting the Covid-19 vaccine, it was seen that 47.9% of the participants answered "I'm waiting in line", and the remaining answers were "I don't want" (9.6%), "I don't trust the vaccine" (9%), and "I'm afraid" (0.6%). When the total score averages of the anti-vaccine scale were evaluated according to the socio-demographic characteristics of the participants; It was determined that the 18-40 age group, which was younger than the individuals participating in the study, had a higher anti-vaccination with a mean of 49.74±15.63 ($p<0.05$). 8.1% of the participants had a chronic disease, and it was determined that the anti-vaccine scale score was 41.85±14.79, the anti-vaccination scale score of the individuals without chronic disease was 46.37±15.35, and the vaccine response was higher in those without chronic disease ($p=0.07$). In addition, individuals with Covid-19 had 48.62±15.64, those whose family died due to Covid-19 disease had 47.48±16.86, and those who were not vaccinated had higher averages with 47.28±15.09, although it did not make a significant difference ($p>0.05$). However, it

was determined that the mean anti-vaccination mean of individuals who had a family member with Covid-19 disease (48.02±16.48), who were not vaccinated (47.28±15.09), Endocrine or Cardiovascular system disease were found to be significantly higher. When evaluated according to the question asked to the patients about why they do not prefer to be vaccinated; it was seen that the highest mean was 63.17±15.03 in the group giving the answer "I don't trust the vaccine" ($p<0.05$).

Results: It has been seen that the attitudes after the Covid-19 epidemic, the obvious reason for vaccine rejection, are people's prejudices against vaccines and the way they interpret the situations they experience about the disease. In order to reduce vaccine rejection, educational organizations should be planned on the benefits of vaccines before the society has prejudices against vaccines.

Keywords: Vaccines, vaccine rejection, epidemiology, public health, disease outbreaks

SÖZEL 5

The Effect Of Mindfulness-Based Training On Self-Competence Perception Of Individuals That Have Been Disabled By The Substance Competence

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Background: As per the literature review, it has been observed that substance-use disorder is an increasingly important community health problem and further work is needed in this area. There is a need to prevent this rapidly spreading problem and to conduct research in this area. Since substance-use disorder is a public health problem, a multidisciplinary approach should be taken as a basis when dealing with substance-use.

Objective: The aim is to identify the effect of mindfulness-based education, which is in accordance with self-efficacy theory, given to individuals who have substance abuse disorders.

Hypothesis of the study

H0. At the end of the mindfulness-based education, there is no difference in self-efficacy-sufficiency in the experimental group compared to the control group.

H1. At the end of the mindfulness-based education, self-efficacy-sufficiency is higher in the experimental group than in the control group.

Method: The research was done as a test model with pretest-posttest control groups. Individuals who have been diagnosed with substance abuse in the substance abuse clinic of Turgut Özal Medical Center, and at the Substance Abuse Treatment and Education Centre of Gaziantep 25 Aralık State Hospital formed the core of this study. The research was conducted between January 2018-May 2019. 112 patients, 56 in the treatment and 56 in the control group, participated in the study. Scientific research started after ethical approval. Mindfulness therapy was applied to experimental group patients. For the data collection, the Socio-Demographic Caracteristics Questionnaire and Self-Effecacy scale were used.

Finding: When the difference between pre-intervention and post-intervention self-efficacy scale sub-factors and total score averages of the patients in the experimental group was examined; It was determined that there was a significant difference between the steps of maintaining the behavior, completing the behavior, coping with obstacles and total self-efficacy scores after the intervention ($p<0.05$), and there was no significant difference between the pre-test and post-test measurements in the factor of starting the behavior from the self-efficacy steps. When the results of the difference between the pretest and posttest self-efficacy scale sub-factors and total score averages of the patients in the control group were examined; It was determined that there was no significant difference between the self-efficacy steps, starting the behavior, maintaining the behavior, completing the behavior, coping with the obstacles, and the self-efficacy total score averages. It was seen that the average total self-efficacy score of the patients in the treatment group was 76.50±12.62 before the intervention, and increased to 85.50±14.95 after the intervention. There is a significant difference between the average scores. Even when the treatment and control groups are compared, a significant difference was still detected between the groups ($p<0.05$).

Result: There was no significant difference between the groups in one of the self-efficacy steps after the intervention in the experimental group, but there were significant differences between the other three factors and total score averages.

Keywords: Mindfulness, nurse, theory, substance abuse disorder, self-efficacy,

SÖZEL 6

The Effect of Health Education Provided to Primary School Students on Screening Results

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Abstract

Background: Today, school health nurses should perform health screenings, case management, health education and counseling, sanitation and safety of the school environment in addition to standard nursing practices and evaluate the results of interventions.

Hypotheses

H1. Hygiene and health screening results of children from families with low economic status are negative.
H2. Health education given to primary school students affects the screening results.

Objectives: This study aimed to find the effect of health education given to primary school students on health screening results.

Method: This research is a pre-test and post-test quasi-experimental model with a single experimental group. The whole universe has been reached in the research. 460 primary school students participated in the pre-test screening and 400 students in the post-test screening. An Introductory Information Form and Screening Test Application Form were used to collect data. After all the students in the school were educated about cleaning habits and proper nutrition, the contribution of the education to the screening results was evaluated.

Findings: It was determined that the children with head lice were girls, had a lower income, and whose mothers had never been to school ($p<0.05$). More dandruff was detected in children of worker father and children who went to the second grade. It was determined that 117 of the first-year students had dental caries and hygiene problems, and these problems were an important difference. According to the results of the height and weight screening at the pretest stage, the average height and weight of the students were 124.8 ± 7.32 and 24.93 ± 4.93, respectively. In the final stage, the average height and weight were 127.27 ± 7.39and 26.34 ± 5.34, respectively. A significant difference was found between pretest and posttest screening results ($p<0.05$). According to the data obtained from the students' visual scans, 29.8% and 2.7% were determined to have vision problems between 20 ft and 30 ft and between 40 ft and 50 ft, respectively. According to the data obtained from

the screening criteria in the last test phase, 13.2% and 1% of the students had dandruff and lice, respectively. When the results of the students regarding oral hygiene are examined, 60% had decayed teeth. According to the visual screening results, 7.8% and 0.9% of them had problems in their vision range of 20–30 ft and 40–50 ft. The students who had tooth decay and vision problems were treated after the pretest screening. When the pretest posttest scans were compared, it was determined that the rate of head lice decreased, and this was a significant difference ($p<0.05$).

Result: These results show the importance of increasing the support of economically weak regions regarding health education.

Keywords: Community health nursing, health education, public health nursing, school health, screening.

SÖZEL 7

SPONTANEOUS PNEUMOMEDIASTINUM, PNEUMOTHORAX, PNEUMOPERICARDIUM AND SUBCUTANEOUS EMPHYSEMA IN COVID-19 PNEUMONIA: A RARE CASE AND LITERATURE REVIEW

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ABSTRACT

The most common chest CT findings in patients with COVID-19 are ground-glass opacification (GGO) with or without consolidative abnormalities. By the way, spontaneous pneumomediastinum (SPM), pneumothorax (PNX), pneumopericardium (PPC), and subcutaneous emphysema (SCE) are unusual complications in COVID-19.

A 24-year-old male patient was admitted to the emergency department with shortness of breath, fever, and persistent cough three days apart. Although no mediastinal pathology was noted three days ago, the current CT scan presents GGO with reticular opacities, SCE, SP, bilateral PNA, and PPC. SPM, PNX, PPC, and SCE

are unusual complications in COVID-19. There are so few cases published in the literature, and our case presents all of these uncommon complications together, and it is infrequent.

This report discussed a case with SPM, PNX, PPC, and SCE rare complications of COVID-19 pneumonia, by comparing with the current literature.

KEYWORDS: COVID-19, spontaneous pneumomediastinum, pneumothorax, pneumopericardium, subcutaneous emphysema

INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a respiratory tract infection caused by the severe acute respiratory syndrome virus coronavirus 2 (SARS-CoV-2) (Khan et al., 2020). The disease mainly affects the airways and lungs, and the most common symptoms of COVID-19 include fever, cough, and shortness of breath (Struyf et al., 2020). The accepted diagnosis method is real-time reverse transcription-polymerase chain reaction (RT-PCR) from a nasopharyngeal swab. Even if it is not considered a routine screening and diagnosis method, computed tomography (CT) in patients with suspected COVID-19 is essential (ACR, 2020). The most common chest CT findings in patients with COVID-19 are ground-glass opacification (GGO) with or without consolidative abnormalities (Bao et al., 2020). The less common CT findings can be listed as pleural and pericardial effusion, lymphadenopathy, cavitation, CT halo sign. Spontaneous pneumomediastinum (SPM), pneumothorax (PNX), pneumopericardium (PPC), and subcutaneous emphysema (SCE) are unusual complications in COVID-19 (Salehi et al., 2020).

This report discussed a case with SPM, PNX, PPC, and SCE rare complications of COVID-19 pneumonia, by comparing with the current literature.

CASE REPORT

A 24-year-old male patient was admitted to the emergency department with shortness of breath, fever, and persistent cough. He had no underlying disease. His complaints started three days ago, and the patient first applied to the emergency room at that time. The physical examination revealed a calm patient with no apparent respiratory distress, and his general condition was moderate. No abnormality was detected on vital signs. His initial laboratory studies were remarkable for normal white cell count 6.1×109/L with a neutrophil count of 75.1% and lymphocyte count of 12.6%. His D-dimer was initially 630 ng/mL, ferritin 1368 ng/mL, lactate

dehydrogenase (LDH) 421 U/L, and C-reactive protein (CRP) 31.4 mg/L (Table-1). Due to the current ongoing pandemic, COVID-19 was suspected, and an RT-PCR test was performed from the nasopharyngeal swab, and it was positive. On chest CT showed bilateral peripheral GGO, but no mediastinal pathology was noted (Figure-1). We planned to hospitalize the patient in a COVID-19 ward. However, the patient did not accept inpatient treatment and was discharged from the emergency room. After three days, the patient has admitted to the emergency room again as a response to his complaints progressed. On arrival, his general condition was poor, and he was conscious and oriented, with a Glasgow Coma Scale of 15/15. On vital signs, the patient's temperature was 38.5 °C, heart rate and respiration rate were 130 and 26 per minute, respectively. Blood pressure was 100/70 mmHg. The initial SpO2 (peripheral oxygen saturation) was 70 on room air. His physical examination was remarkable, with decreased breath sounds in the left lung and subcutaneous crepitations on the neck and anterior chest. Initial treatment and oxygen support were started quickly, and complete blood count, biochemical analysis, chest CT were obtained. His laboratory findings were remarkable with high leukocyte count, liver function tests, ferritin, CRP, D-dimer, and low neutrophil count (Table-1).

On the chest-CT, typical manifestations like widespread bilateral GGO with reticular opacities predominantly located in the periphery were observed. Except for this, SCE in the upper chest and neck, SP, bilateral PNX, and PPC were found on the CT scan (Figure-2).

Clinical treatment included an antibiotic (ceftriaxone), low-dose methylprednisolone, enoxaparin, symptomatic therapy, and oxygen supplementation by the reservoir with 50% FiO2. No invasive ventilation was performed in the Emergency room, and the patient was taken to the intensive care unit due to his poor condition. The patient did not improve despite intensive care treatment and died seven days after the symptoms began.

DISCUSSION

Chest CT is a reliable scan method to identify lung lesions caused by SARS-CoV-2 infection. The most characteristic findings include GGO and consolidation. SPM, PNX, PPC, and SCE are unusual complications in COVID-19. However, these rare findings are associated with a poor prognosis (Sun et al., 2020).

The SARS-CoV-2 virus enters the cells through the Angiotensin-Converting Enzyme-2 receptor, usually expressed in the alveolar cells, and can trigger an excessive host immune response, leading to extensive tissue damage (Zhang et al., 2020).

PNX is an air accumulation between the visceral and parietal pleura that can impair oxygenation and ventilation and is classified into three categories: spontaneous (primary or secondary), traumatic and iatrogenic. In most cases, PNX occurs secondary to barotrauma due to mechanical ventilation. Our patient received medical treatment only at home in the three intervening days and was not exposed to any baro- or physical trauma during this period. PNX may has occurred due to alveolar damage caused by the SARS-CoV-2 virus and severe straining during a persistent cough (Sahn & Heffner, 2000).

SPM is the air accumulation along the mediastinum, occurring in conditions, not of traumatic or iatrogenic origin. Considering that our patient was not exposed to any trauma, PM developed spontaneously. This involves the dissection of extrapulmonary air through the thoracic cavity and can result in mechanical obstruction, which will interfere with the heart and the blood vessels, causing a decrease in circulation (Murayama & Gibo, 2014). SPM may be due to air leakage from the interstitial space due to a large pressure gradient between the marginal alveoli and the lung interstitium (Park et al., 2016).

PM-related pressure in the mediastinum results in the tracking of air into the subcutaneous tissue (Kouritas et al., 2015). Free air usually spreads to the root of the neck, although it can also spread to the face, limbs, abdomen, and perineum. Air can also track to the pericardial tissue causing PPC (Allen et al., 2015).

SPM, PNX, PPC, and SCE are unusual complications in COVID-19. There are so few cases published in the literature, and our case presents all of these uncommon complications together, and it is infrequent. The point that makes our case unique is that our CT findings are well documented, with two CT scans were taken three days apart.

CONCLUSIONS

SPM, PNX, PPC, and SCE can rarely occur in SARS-CoV-2 patients. However, clinicians should be careful that such rare symptoms may be underlying, especially in persistent and malignant cases. Treatments that cause barotrauma should be avoided, especially in patients with SPM, PNX, PPC, and SCE.

REFERENCES

1) ACR, American College of Radiology. (2020), Recommendations for the use of Chest Radiography and Computed Tomography (CT) for Suspected

COVID-19 Infection, https://www.acr.org/Advocacy-and-Economics/ACR-Position-Statements/Recommendations-for-Chest-Radiography-and-CT-for-Suspected-COVID19-Infection (Accessed on April 01, 2020).
2) Allen, C. J., Teisch, L. F., & Stahl, K. D. (2015). Spontaneous pneumomediastinum, pneumopericardium and epidural pneumatosis: insights on clinical management. Acute cardiac care, 17(1), 20–23. https://doi.org/10.3109/17482941.2015.1005103
3) Bao, C., Liu, X., Zhang, H., Li, Y., & Liu, J. (2020). Coronavirus Disease 2019 (COVID-19) CT Findings: A Systematic Review and Meta-analysis. Journal of the American College of Radiology : JACR, 17(6), 701–709. https://doi.org/10.1016/j.jacr.2020.03.006
4) Khan, M., Khan, H., Khan, S., & Nawaz, M. (2020). Epidemiological and clinical characteristics of coronavirus disease (COVID-19) cases at a screening clinic during the early outbreak period: a single-centre study. Journal of medical microbiology, 69(8), 1114–1123. https://doi.org/10.1099/jmm.0.001231
5) Kouritas, V. K., Papagiannopoulos, K., Lazaridis, G., Baka, S., Mpoukovinas, I., Karavasilis, V., Lampaki, S., Kioumis, I., Pitsiou, G., Papaiwannou, A., Karavergou, A., Kipourou, M., Lada, M., Organtzis, J., Katsikogiannis, N., Tsakiridis, K., Zarogoulidis, K., & Zarogoulidis, P. (2015). Pneumomediastinum. Journal of thoracic disease, 7(Suppl 1), S44–S49. https://doi.org/10.3978/j.issn.2072-1439.2015.01.11
6) Murayama, S., & Gibo, S. (2014). Spontaneous pneumomediastinum and Macklin effect: Overview and appearance on computed tomography. World journal of radiology, 6(11), 850–854. https://doi.org/10.4329/wjr.v6.i11.850.
7) Park, S. J., Park, J. Y., Jung, J., & Park, S. Y. (2016). Clinical Manifestations of Spontaneous Pneumomediastinum. The Korean journal of thoracic and cardiovascular surgery, 49(4), 287–291. https://doi.org/10.5090/kjtcs.2016.49.4.287
8) Sahn, S. A., & Heffner, J. E. (2000). Spontaneous pneumothorax. The New England journal of medicine, 342(12), 868–874. https://doi.org/10.1056/NEJM200003233421207
9) Salehi, S., Abedi, A., Balakrishnan, S., & Gholamrezanezhad, A. (2020). Coronavirus Disease 2019 (COVID-19): A Systematic Review of Imaging Findings in 919 Patients. AJR. American journal of roentgenology, 215(1), 87–93. https://doi.org/10.2214/AJR.20.23034.
10) Struyf, T., Deeks, J. J., Dinnes, J., Takwoingi, Y., Davenport, C., Leeflang, M. M., Spijker, R., Hooft, L., Emperador, D., Dittrich, S., Domen, J., Horn, S., Van den Bruel, A., & Cochrane COVID-19 Diagnostic Test Accuracy Group (2020). Signs and symptoms to determine if a patient presenting in primary care or

hospital outpatient settings has COVID-19 disease. The Cochrane database of systematic reviews, 7(7), CD013665. https://doi.org/10.1002/14651858.CD013665

11) Sun, R., Liu, H., & Wang, X. (2020). Mediastinal Emphysema, Giant Bulla, and Pneumothorax Developed during the Course of COVID-19 Pneumonia. Korean journal of radiology, 21(5), 541–544. https://doi.org/10.3348/kjr.2020.0180

12) Zhang, H., Penninger, J. M., Li, Y., Zhong, N., & Slutsky, A. S. (2020). Angiotensin-converting enzyme 2 (ACE2) as a SARS-CoV-2 receptor: molecular mechanisms and potential therapeutic target. Intensive care medicine, 46(4), 586–590. https://doi.org/10.1007/s00134-020-05985-9

Table-1: Laboratory findings of the patient

	1st admission	2nd admission
Wbc (109/L)	6.1	18.84
Neu%	75.1	93.8
Lym%	12.6	2.9
Kre (mg/dL)	0.85	0.89
AST (U/L)	58	98
ALT (U/L)	56	102
LDH (U/L)	421	979
Crp (mg/L)	31.4	62.0
D-dimer (ng/mL)	630	2560
Ferritin (ng/mL)	1368	>2000

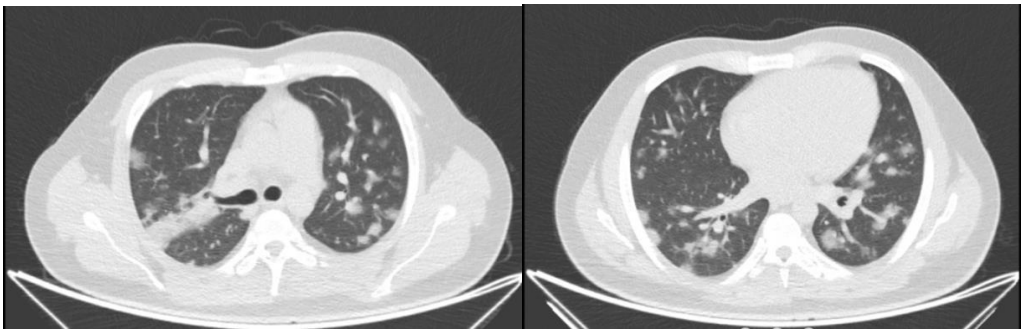

Figure-1: Chest CT showing peripheral GGO but no mediastinal pathology.

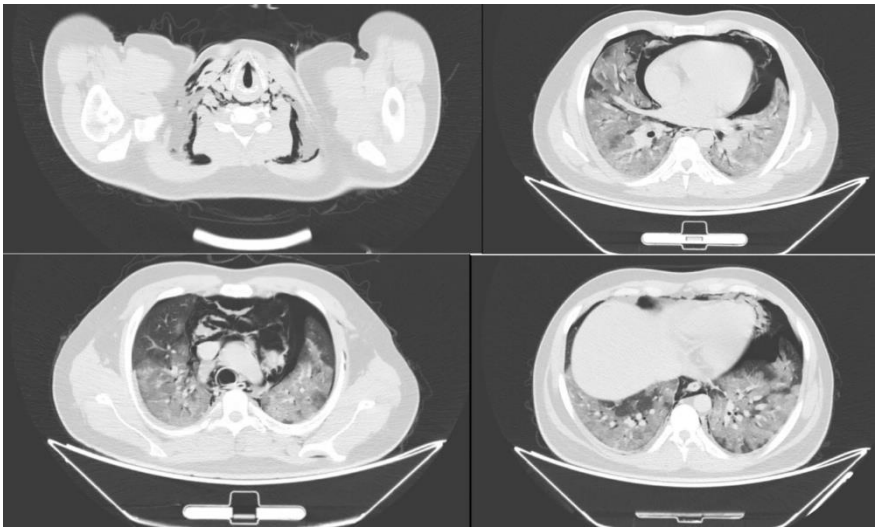

Figure-2: Chest CT showing GGO with reticular opacities predominantly located in the periphery, SCE in the upper chest and neck, SP, bilateral PNX, and PPC.

SÖZEL 8

Comparison of Prostate Cancer Cases in Şırnak with Real-Life Data and Literature

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Objective: In the male population prostate cancer is the second most common malignancy in our country recently. The role of the 1st stage health institutions in suspicion of cancer, which is the most important stage in the pre-diagnosis, and in the post-treatment follow-up process are important. In this study, we aimed to evaluate the number of prostate cancer cases in Şırnak province and its comparison with the available data.

Method: Data of prostate cancer patients of Şırnak State Hospital Urology Clinic, which is the only center in the city where prostate biopsy was performed, were collected through the hospital data system between August 2020 and August 2021. According to the GLOBOCAN 2020 database, the incidence of prostate cancer in our

country was found to be 42.5 per 100 thousand. Then the data were analyzed with the Jamovi v1.1.9 package program.

Results: It was determined that a total of 12 prostate biopsies were performed between the specified dates. While all of the patients had elevated PSA levels, 1 also had positive finding on rectal examination. The mean age of the patients was 59.75 years. Mean Total PSA was 9.33. All patients underwent standard 12-quadrant prostate biopsy under transrectal ultrasound guidance. Pathology was reported as benign in 10 of the patients (BPH / Chronic prostatitis). Malignant pathology was detected in 2 patients. In one of these patients, the pathology result was reported as Prostate Adenocancer Gleason score of 3+3 in 2 quadrants and radical prostatectomy was performed on the patient. In the other patient, the pathology result was reported as 3+3 Prostate Adenocancer Gleason score below 5% in one quadrant, and the patient was included in the active follow-up protocol.

According to TUIK data for 2020, the population of Şırnak is 537762. The incidence of prostate cancer was found to be 0.37 per 100 thousand.

Conclusion: We think that the proportional excess of the young population, possible difficulties in accessing health services, low socioeconomic level and deficiencies in education level are among the reasons why the incidence of prostate cancer is very low in Şırnak province compared to the country in general. For this reason, the 1st stage health institutions, which are the first to be reached in the field of health, have a great responsibility in terms of evaluation and guidance for prostate cancer.

Keywords: Prostate Cancer, Incidence, Malignancy

SÖZEL 9

Evaluation of COVID-19 related anxiety in caregivers of patients receiving home care service

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Objectives:

This study aimed to evaluate the level of anxiety about coronavirus in the pandemic period of caregivers of patients receiving home care service.

Methods:

The Coronavirus Anxiety Scale (CAS) was applied to the caregivers of the patients who received home care service during the pandemic period in September 2021. Only one caregiver was accepted for each patient. The level of coronavirus anxiety and the effect of vaccination status against coronavirus on the anxiety levels were investigated. Fully vaccinated was defined as having two doses of Covid-19 mRNA vaccine or 2 doses of COVID-19 inactivated vaccine and 1 dose of Covid-19 mRNA vaccine or 3 doses of COVID-19 inactivated vaccine or 2 doses of COVID-19 inactivated vaccine, the second of which was in the last 6 months.

Results:

A total of 108 caregivers (80 females, 28 males) out of 339 patients registered in the home care unit were enrolled in the study. The mean age for women was 49.81 (median 52, min. 21, max. 82), and for men was 51.04 (median 50.5, min. 20, max. 77) (p=0.648). According to the vaccination status, 90 people (83.3%, 64 women) were fully vaccinated, 6 people (5.6%, 5 women) were under-vaccinated, and 12 people (11.1%, 11 women) were not vaccinated. The mean CAS score was 1.21 (median 0, min.0, max.18) in females and 0.61 (median 0, min0, max.5) in males. There was no significant difference between genders and coronavirus vaccination statutes in terms of CAS score (p=0.319, p=0.279, respectively).

Conclusion:

The caregivers of patients registered to our hospital home care unit has low COVID-19 related anxiety. The high level of being fully vaccinated may be one of the main factors affecting this situation.

Keywords: COVID-19, anxiety, caregivers, home care

SÖZEL 10

Is Blood Sugar Always High in Diabetic Ketoacidoses?

Case of Euglycemic Ketoacidosis

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INTRODUCTİON

Sodium glucose co-transporter type 2 (SGLT2) is a pump involved in the reabsorption of filtered glucose in the kidneys. Dapagliflozin, canagliflozin and empagliflozin, which are newly developed drugs in the treatment of diabetes, inhibit

SGLT2 pumps, reduce glucose reabsorption in the kidney and cause glucose excretion in the urine. Targeted normoglycemia may cause increased ketone bodies and acidosis in insulinopenic patients despite normal blood glucose levels. A case of euglycemic ketoacidosis in a diabetic patient using SGLT2 inhibitor who applied to the emergency department of our hospital is presented.

CASE REPORT

SGLT2 inhibitor was added to the treatment of a 48-year-old male patient who was followed up for type 2 diabetes for 5 years because his fasting blood glucose was not on target 3 months ago. In the examinations of the patient who applied to the emergency department with complaints of weakness, nausea and vomiting for 2 days, blood sugar was found to be 195 mg/dl, pH 7.0 and hco3 8 mg/dl. The lactate level of the patient who had 2+ ketonuria in the complete urinalysis was normal. The patient, whose base deficit was calculated as 20, was evaluated as a case of SGLT2 inhibitor-induced euglycemic ketoacidosis because her blood glucose level was normal. The patient was admitted to the internal medicine service and intravenous hydration and insulin infusion were started. In the follow-ups, the patient whose acidosis improved and ketone negativity was observed, subcutaneous insulin therapy was started.

RESULT

Euglycemic ketoacidosis is a clinical picture with high mortality and morbidity. SGLT2 inhibitors, one of the newly developed oral antidiabetics, are among the molecules we prefer in the clinic. Patients may be in deep acidosis even though their blood sugar is normal or slightly elevated. Early diagnosis and early IV hydration and insulin therapy are life-saving.

KEY WORDS: Euglycemic Ketoacidosis, SGLT2, Diabetes Mellitus

SÖZEL 11

Clinical analysis of cases with acute opthalmoplegia applying to emergency department

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Objective: In cases with acute onset opthalmoplegia, efficient emergency and neuro-radiological evaluation is crucial for differential diagnosis as some of these patients may develop mortal complications unless treated early.
Method: Different manifestations of opthalmoplegia, neuroradiologic findings, final diagnosis and acute treatment of the patients were evaluated. Patients with only pure oculomotor cranial nerves were included. Conjugate gaze abnormalities and diseases of extraocular eye muscles and intraorbital pathologies were excluded.
Findings: A total of 27 patients evaluated restrospectively who admitted to the emergency department and diagnosed with opthalmoplegia with pure oculomotor cranial nerve involmement. Mean age was 48.33±18.83. Thirteen out of 27 (13/27) patients were women. The most common finding was binocular diplopia. Additional neurological symptoms were ptosis, headache, ataxia and loss of consciousness respectively. Five of the patients had painful opthalmoplegia. Four out of 27 patients (4/27) had combined multiple cranial oculomotor nerve involvement. The abductor nerve palsy was the most common finding (n:16). The number of oculomotor nerve palsy was present in thirteen patients and trochlear nerve palsy only in one patient. Only three of the patients presented with abnormal brain computed tomography. Ten of the patients (10/27) had pathologic findings in high resolution thin slice sequences in brain magnetic resonance imaging. The most common diagnosis was Anti-GQ1b antibody syndrome related disorder consisting of Miller Fisher Syndrome and Bickerstaff brainstem encephalitis (n:5). The other diagnosed diseases were ocular myasthenia gravis (n:4), diabetic cranial neuropathy (n:3), Tolosa Hunt Syndrome (n:2), anterior communicating aneurysm (n:2), carcinomatous menengitis (n:2), idiopathic intracranial hypertension (n:2), idiopathic etiology (n:2), pituitary apoplexy (n:1), listeria encephalitis (n:1), mesencephalic enfarct (n:1), fungal sinusitis (n:1) and opthalmoplegic migraine (n:1). The patients with anterior communicating artery aneurysms and pituitary apoplexy went through emergency interventional and/or surgical treatment after emergency evaluation whereas Anti-Gq1b syndromes and Tolosa Hunt Syndrome received emergent pulse steroid and intravenous immunoglobulins.
Result The knowledge of relationship between neurological findings and opthalmoplegia is very important in clinical practice as emergency evaluation is warranted. Many of these patients have normal computed tomography scans and further optimized investigation protocols including magnetic resonance imaging and electromyography may be needed for early diagnosis and treatment.

Key words: Acute opthalmoplegia, emergency service, neurology service

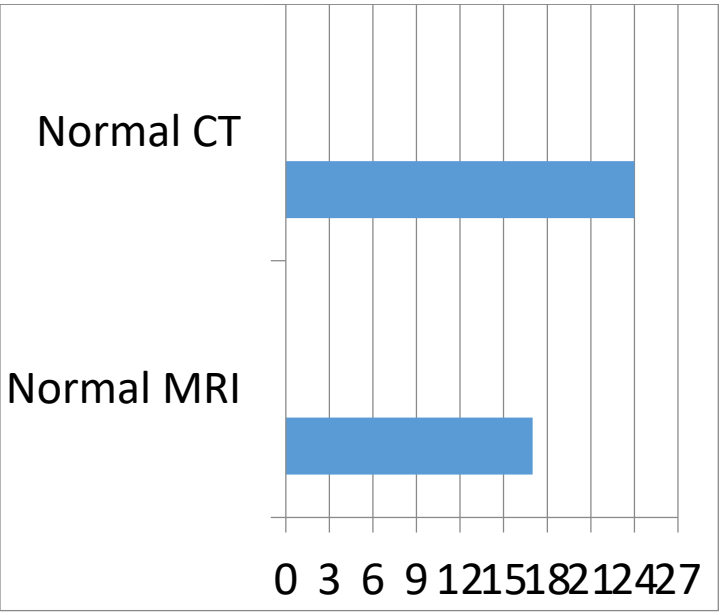

Table 1: The patients with normal Cranial Tomography (CT) and Magnetic Resonance Imaging (MRI)

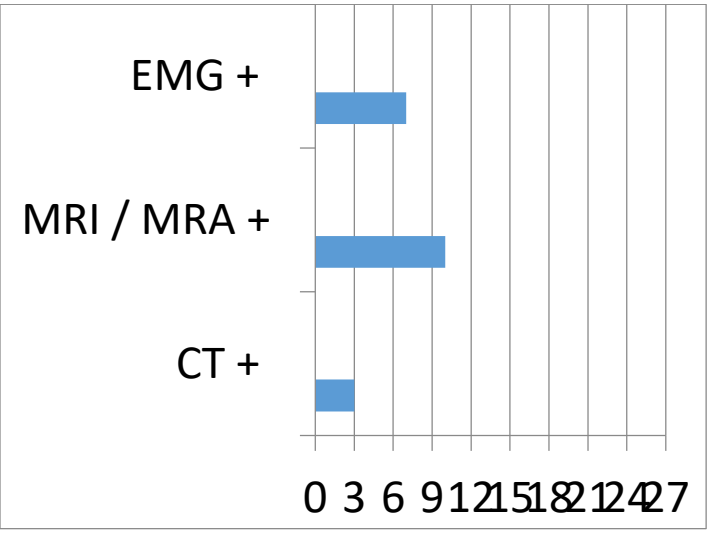

Table 2: The patients with positive findings in Electromyographic study (EMG), Magnetic Resonance Imaging (MRI) or MR Angiography (MRA) and Cranial Tomography (CT)

References:

1. Lal V, Caplan L. Are some ophthalmoplegias migrainous in origin?. Neurology: Clinical Practice. 2019 Jun 1;9(3):256-62

2. Weidauer S, Hofmann C, Wagner M, Hattingen E. Neuroradiological and clinical features in ophthalmoplegia. Neuroradiology. 2019 Apr 12;61(4):365-87

3. Shahrizaila N, Yuki N. Bickerstaff brainstem encephalitis and Fisher syndrome: anti-GQ1b antibody syndrome. Journal of Neurology, Neurosurgery & Psychiatry. 2013 May 1;84(5):576-83.

4. Diker S, Okar S, Mehdikhanova L, Arsava EM, Kurne A, Çevik IÜ, Akyön Y, Alp S, Inkaya Ç, Akova M, Mut M. Neuroinvasive Listeriosis: Could Petechial Hemorrhages be a Diagnostic Clue?. The neurologist. 2018 May 1;23(3):86-91.

5. Kaymakamzade B, Selcuk F, Koysuren A, Colpak AI, Mut SE, Kansu T. Pupillary involvement in Miller Fisher syndrome. Neuro-ophthalmology. 2013 Jun 1;37(3):111-5.

6. Gelener P, Akpinar HS. Unruptured aneurysm producing thunderclap headache treated with endovascular coil embolization. Agri. 2018 Jul 1;30(3):146-9.

SÖZEL 12

Evaluation of Serum Copeptin Levels in Patients with Migraine Attack Presenting to the Emergency Department

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Introduction: Migraine is a primary headache disorder according to the International Headache Society (IHS) classification. It is a neurovascular disorder caused by mechanisms involving neurogenic inflammation, cerebral vasomotor dysfunction and cerebrovascular inflammation (1). It is reported that neuroinflammatory conditions, cytokines, numerous neuropeptides and vasomotor changes are responsible for migraine. Vasoactive peptides formed as a result of trigeminal nerve stimulation with the onset of migraine attacks; it causes an increase in blood flow, leakage of protein from the vessels and a neurogenic inflammation (2). The etiology of migraine is still not fully understood. Although the identification and validity of biochemical markers has greatly improved in other diseases, there are currently no accepted biochemical markers for chronic or episodic migraine attacks (2,3). Arginine-vasopressin (AVP) is an important hypothalamic stress hormone in peptide structure and it released from the hypothalamus. Copeptin, which is the precursor of AVP and forms the C-terminal part of the 164 amino acid pre-provasopressin molecule, is a 39 amino acid glycopeptide. (4). Copeptin is a new and easy to measure biochemical marker of AVP (5). Many physiological and pathological stimuli such as pain, hypoglycemia, hypoxemia, stroke, infection, shock and stress cause copeptin to be released (4,5). Research on the relationship between serum copeptin level and acute migraine episodes is quite limited. In this study, we aimed to investigate the correlation between serum copeptin level, which is released as a potential biochemical marker for acute pain by sympathetic stress stimulation, and Migraine Disability Assessment Score (MIDAS) in patients who applied to the emergency department with the complaint of headache due to migraine attack. In addition, it was aimed to determine whether the serum copeptin level has a predictive value in the differentiation of migraine type (with and without aura).
Methods: Eighty adult patients who applied to the Emergency Department of Health Sciences University - Haseki Health Application and Research Center with the complaint of migraine attack between June 2020 and November 2020, and 80 healthy volunteers of similar age and gender were included in the study as a control group. The mean serum copeptin levels of the patient and control groups at the first admission were compared. According to MIDAS score, patients presenting with migraine attacks were divided into 4 separate groups; no disability (MIDAS; 0-5), mild disability (MIDAS; 6-10), moderate disability (MIDAS; 11-20), and severe disability (MIDAS; 21 and above).Serum copeptin levels were compared in order to determine the degree of disability between the groups. In addition, migraine patients were divided into 2 subgroups, with aura and without aura, and mean serum copeptin

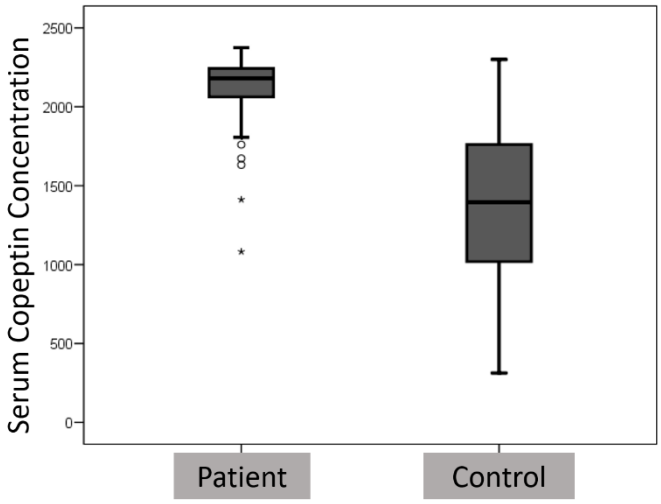
levels of the groups were compared.
Results: A total of 80 patients, 61 female (76.2%) and 19 male (23.8%) diagnosed with migraine attack, were included in the study. The mean serum copeptin value of the control group was 1383.40 ± 488.40 pg/ml (median 1394.50), and the lowest and highest values were 313 and 2300. The mean serum copeptin value of the patient group was 2113.30 ± 206.20 pg/ml (median 2180), and the lowest and highest values were 1082 and 2375. The mean serum copeptin levels of the patient group were found to be statistically significantly higher than the control group (2113.30 ± 206.20 vs. 1383.40 ± 488.40; p <0.001) (Table 1)

Table 1. Comparison of patient and control groups in terms of gender and serum copeptin levels

		Patient		Control		
		n	%	n	%	P*
Gender	**Male**	19	23,8	19	23,8	>0,05
	Female	61	76,2	61	76,2	
		Mean±SD	Min-Max (Median)	Mean±SD	Min-Max (Median)	
Copeptin (pg/ml)		2113,30 ± 206,20	1082-2375 (2180)	1383,40 ± 488,44 (1394,50)	313-2300 (1394,5)	**<0,001**

Data were given as number, percentage, mean ± standard deviation, minimum and maximum (median). *Independent sample t-test and Chi-square test were used for age comparison between the patient and control groups. Mann-Whitney U test was used to compare serum copeptin levels.

For determining the patient group, with 90% sensitivity and 82.4% specificity, copeptin level of 1898,5 pg/ml and above was found as cut-off value.



There was no statistically significant difference in mean serum copeptin levels between the groups classified according to the MIDAS score (p=0.972). Similarly, no significant correlation was found between MIDAS score and serum copeptin level in patients presenting with acute migraine attack (rho=0.017 and p=0.883). In addition,

no statistically significant difference was found between the mean serum copeptin levels of migraine patients with and without aura (2118.70 ± 211,60 vs. 2071.10 ± 160.40; p=0.160) (Table 2)

Table 2. Distribution of serum copeptin concentrations according to aura and MIDAS

		Copeptin concentration			
		Mean ± SD	Min-Max	Median	p*
Migraine	With aura	2118,70 ± 211,60	1082-2375	2180	0,160
	Without aura	2071,01 ± 160,04	1806-2307	2121	
MIDAS	I	2118,60 ± 164,00	1760-2307	2180	0,972
	II	2097,80 ± 256,30	1082-2375	2180	
	III	2127,30 ± 177,90	1412-2307	2180	
	IV	2111,70 ± 161,50	1806-2307	2180	

Data were given as mean, ± standard deviation, minimum and maximum (median) values.
*Mann Whitney U test was used to compare serum copeptin levels in terms of preticting of aura and MIDAS between groups.

Discussion and Conclusion: In our research, we found that prevalance of migraine varied according to gender and age. Among the patients that presented to the emergency department with headache, 76,2% were female and 23,8% were male, which shows a three fold difference. Mean age was 36,7 (±9,8, 18-56) representing middle age. These data were comparable to the literature. In our research, a significant correlation (p <0.001) was found between copeptin levels of the patients and the control group. When the literature is examined, it is seen that similar results are obtained. For example, Yılmaz et al. (6) conducted on 52 migraineurs and 51 healthy individuals, the mean copeptin levels were found to be 689.28pg/ml and 576.68pg/ml in the patient group during the attack and non-attack periods, respectively, while it was 608.68pg/ml in the control group. There was a significant difference (p=0.026) in the mean copeptin levels in the attack period and the attack-free period. In the aforementioned study, it was emphasized that although the diagnostic efficacy of serum copeptin levels for migraine was insufficient, it could be helpful in the management of migraine patients in the emergency department. Consequently, serum copeptin levels in patients diagnosed with migraine attack are not useful in predicting the severity of migraine-related disability measured by the MIDAS score. However, recognition of headache associated with migraine attack in conjuction with clinical signs and symptoms, serum copeptin has a cut-off value of 1898,5 pg/ml with a specificity of 82.4% and a sensitivity of 90%.

Keywords: Serum copeptin, MIDAS, primary headache, migraine with aura, migraine without aura.

References
1.Headache Classification Committee of the International Headache Society (IHS) The International Classification of Headache Disorders, 3rd edition. Cephalalgia. 2018; 38 (1): 1–211.
2.Avci AY, Lakadamyali H, Arikan S, et al. High sensitivity C-reactive protein and cerebral White matter hyperintensities on magnetic resonance imaging in migraine patients. J HeadachePain2015;16:9.
3.Durham P, Papapetropoulos S. Biomarkers associated with migraine and their potential role in migraine management. Headache. 2013;53(8):1262-1277.
4.Luckner G, Dünser MW, Jochberger S, Mayr VD, Wenzel V, Ulmer H, Schmid S, Knotzer H, Pajk W, Hasibeder W, Mayr AJ, Friesenecker B. Argininevasopressin in 316 patients with advanced vasodilatory shock. Crit Care Med. 2005 Nov;33(11):2659-66. doi: 10.1097/01.ccm.0000186749. 34028.40.
5.Land H, Schütz G, Schmale H, Richter D Nucleotidesequence of clonedc DNA encodingbovine argininevasopressin-neurophysin II precursor. Nature. 1982; 295 (5847): 299–303.
6.Yılmaz DY, Armağan HH, Karaman K, et al. Clinicaluse of copeptin in migraine patients admitted to the emergency department. The American Journal of Emergency Medicine. 2020 Sep;38(9):1910-1914. DOI: 10.1016/j.ajem.2020.05.009.

SÖZEL 13

RELATİONSHİP BETWEEN TYPE 2 DİABETES MELLİTUS, FİBROMYALGİA SYNDROME AND SERUM MAGNESİUM

Özgür altun1

1-Prof.Dr.Cemil Taşçıoğlu Şehir Hastanesi

ABSTRACT

Objective: Fibromyalgia syndrome (FMS) is a disease of unknown cause, characterized mainly by chronic widespread pain accompanied by psychological and somatic complaints. Type 2 diabetes mellitus and hypomagnesemia also have symptoms similar to FMS, such as chronic muscle pain, neuromuscular system manifestations, and fatigue, and little is known about their relationship. Our aim is to determine the relationship between fibromyalgia syndrome and serum magnesium levels in patients with type 2 diabetes. Material and Methods: Patients with type 2 diabetes mellitus who applied to the internal medicine outpatient clinic were included in the study. All patients with chronic pain were evaluated for the presence of FMS. Patients with FMS were defined as the case group and patients without FMS as the

control group, and serum magnesium levels of both groups were measured. Results: FMS was higher in women. When diabetic patients with and without FMS were compared, the diabetes year was found to be longer in the group with FMS, respectively . Hypomagnesemia was found 2.619 times more in the group with FMS. Serum magnesium level was negatively correlated with HbA1c and diabetes year . Conclusion: The frequency of hypomagnesemia and FMS is associated with longer duration of Diabetes mellitus. Hypomagnesemia is more common in FMS and is associated with poor control of diabetes.

KEYWORDS

Fibromyalgia Syndrome, Hypomagnesemia, Type 2 Diabetes Mellitus

İNTRODUCTİON

Fibromyalgia syndrome (FMS) is a clinical picture characterized by chronic widespread pain, usually accompanied by fatigue, cognitive disorders and somatic complaints, and painful tender points on palpation on physical examination (1). FMS affects 2-3% of adults worldwide (2). It is more common in women. The etiopathogenesis of FMS is not known exactly, its prevalence has been reported to be higher in diabetes mellitus (3,4). Diabetic neuropathies and hypomagnesemia can lead to FMS-like clinical conditions.

An increase in chronic musculoskeletal complaints has been found in diabetes mellitus (5). It has been reported that there is a positive correlation between high HbA1c levels and tender points in patients with diabetes mellitus (3).

Magnesium is the most important cation in the body, which plays a role in the regulation of enzymatic reactions of various systems such as muscle contraction, energy metabolism, signal transmission in the nervous system. In magnesium deficiency, muscle pain, headache, migraine, fatigue are associated with conditions similar to FMS such as irritable bowel disease (6).

Although diabetes mellitus and hypomagnesemia cause similar complaints with FMS, there are few studies investigating the relationship between them (7).

The aim of this study is to determine the serum magnesium levels of patients with diabetes mellitus according to their FMS and to determine the relationship between diabetes mellitus, FMS and hypomagnesemia. This will give us information about the etiopathogenesis of diabetes mellitus and FMS as well as give the opportunity to new approaches in treatment management.

MATERİALS AND METHODS

A total of 90 patients, male and female, with type 2 diabetes aged 30-65 years, who were routinely examined in the internal medicine outpatient clinic and physical therapy outpatient clinic, were included in our study. 46 patients diagnosed with FMS were defined as the case group, and 44 patients without FMS diagnosis were defined as the control group. Demographic data such as age, gender, body mass index (BMI), duration of diabetes were recorded. Fasting blood glucose (FGG), HbA1c, creatinine, Alanine Amino transferase (ALT), serum magnesium, calcium (Ca) and vitamin D3 levels of the participants were recorded. They were younger than 18 years old, had known rheumatological disease, had active infection, malignancy and kidney function. Individuals with the disorder were excluded from the study.

RESULTS

Diabetes duration was found to be significantly longer in the group with FMS than in the group without FMS (8.2±3.9; 5.8±3.7; p=0.04, respectively). The number of women in the group with FMS was found to be significantly higher than the number of men (p=0.027). Hypomagnesemia was found to be significantly higher in the group with FMS (p=0.05). There was no significant difference between the group with FMS and the group without FMS in terms of age, BMI, magnesium, creatinine, ALT, HbA1c, vitamin D values (p> 0.05) (Table I).

We found a negative correlation between magnesium level and HbA1c (r= -0.223 p= 0.035), and a negative correlation between magnesium level and duration of diabetes (r=-0.312 p= 0.030) (Table II).

Considering other parameters affecting hypomagnesemia, a positive correlation was found between hypomagnesemia and diabetes year (p= 0.021) (Table III).

FMS 2,619, duration of diabetes 1,249 times more .hypomagnesemia risk (OR=2.619 and 1.249, respectively) (Table III).

Table I: Laboratory and Demographic Data of Type 2 Diabetic Group with and Without FMS

	PATIENT GROUP WITHOUT FIBROMYALGIA n=44	PATIENT GROUP WITH FIBROMYALGIA n=46	p
Gender (female /male)*		35(%76)/11(%24)	0.027*

	23(%52)/ 21(%48)		
Age	56,3±10,1	60,5±10,2	0,058
BMİ (kg / m 2)	30,6±5,4	32,7±5,8	0,106
Diabetes duration (yıl)	5,8±3,7	8,2±3,9	0,04**
HbA1c (%)	7,2±1,8	7,4±1,3	0,513
creatinin (mg/dL)	0,6±0,1	1,01±1,4	0,151
ALT (U/L)	21,05±10,2	21,29±9,0	0,911
calcium (mg/dL)	9,4±0,7	9,3±1,0	0,787
Vitamin D (µg/L)	17,6±7,6	19,2±6,5	0,328
magnesium(mg/dL)	1,81±0,22	1,75±0,25	0,320
With hypomagnesemia /withouthypomagnesemia	12(%27) 32(%73)	26(%57) 20(%43)	0,05*

Table II: Correlation Table of Magnesium Level with Other Parameters

Magnesium	bmi	Age	DM duration	D vitamin D	HbA1c
r	0,162	-0,159	-0,312	-0,187	-0,223
p	0,154	0,137	0,003*	0,99	0,035*

* p<0.05 is statistically significant. BMI: body mass index DM: Diabetes Mellitus We found a negative correlation between magnesium level, HbA1c and duration of diabetes. (r=-0.223, p=0.03 and r=-0.312, p=0.030).

Table III: Multivariate Logistic Regression Analysis to Determine the Parameters Affecting Hypomagnesemia

	B	SE	P	95% CI	odd ratio (OR)

FMS *	0,963	0,538	0,074	0,912	7,521	2,619
Diabetes duration	0,222	0,097	0,021	1,033	1,508	1,249
HbA1c	0,131	0,158	0,407	0,836	1,556	1,140
Age	0,16	0,035	0,649	0,948	1,089	1,016
gender **	0,673	0,550	0,230	0,953	5,878	1,959

* Logistic regression test data for those with FMS and ** logistic regression test data for females versus males

DİSCUSİON

FMS is a chronic disease associated with widespread musculoskeletal pain and tenderness, mood and various comorbidities (2). The incidence is higher in women. It was found to be even higher especially in women with type 2 diabetes and FMS (2,3). Consistent with the literature, we found more women in the group with FMS (Table I).

When the coexistence of FMS and diabetes mellitus was examined, the prevalence of FMS was found to be increased in type 2 diabetes (3,4). In our study, the duration of diabetes was longer in the patient group with FMS compared to the group without FMS (Table I). Consistent with our study, Fatima et al. found a longer duration of type 2 diabetes in FMS patients (7). The main finding in FMS is muscle and joint pain, and patients have increased response to painful stimuli (hyperalgesia) and increased response to normal painful stimuli (allodynia). The exact cause is not known, but autonomic neuropathy has been suggested as a pathophysiological mechanism (10). Autonomic neuropathy is more common in diabetes mellitus, and complaints similar to Fibromyalgia occur in the cardiovascular system, gastrointestinal system and neuromuscular systems (5,11). Peripheral neuropathy is more common in type 2 diabetic patients with FMS. It is more hyperalgesic in patients with peripheral neuropathy (12). As the duration of diabetes increases, the prevalence of neuropathy (13) and the frequency of anxiety depression due to chronic disease increase (14). For all these reasons, FMS may be seen more frequently as the duration of diabetes increases.

We found a higher rate of hypomagnesemia in FMS patients (Table I). When we look at the studies on FMS and magnesium in the literature, the exact relationship between them is not clear. There are few studies investigating the relationship between magnesium levels and fibromyalgia patients, especially those with diabetes (7). Fatima et al. (7) found more hypomagnesemia in FMS patients with diabetes,

consistent with our study. They also found an inverse correlation between magnesium level and painful spots (7).

Pain mechanism and changes in muscle are important when explaining the pathophysiology of fibromyalgia. Magnesium acts by inhibiting several nerve receptors that are associated with pain in FMS, such as N-methyl-D-aspartate (NMDA) (15). Magnesium deficiency can lead to hyperalgesia by increasing the activity of the NMDA receptor and increasing substance P (16).

Hypomagnesemia mostly affects the neuromuscular system. Patients experience muscle weakness and cramps. In addition, it may cause decreased vitamin D synthesis and hypocalcemia, and may cause muscle pain (17). Early symptoms of magnesium deficiency are FMS-like, lethargy, fatigue, and weakness (9). Magnesium deficiency has been observed in individuals with chronic fatigue (18). Through these mechanisms, hypomagnesemia may be seen more frequently in FMS.

In our study, we also found that hypomagnesemia was proportional to the duration of diabetes and magnesium levels were inversely correlated with HbA1c (Table II, Table III). In patients with type 2 diabetes, the incidence of hypomagnesemia was found to be high and associated with poor control (19,20). Magnesium plays an important role in glucose and insulin metabolism mainly through its effect on the tyrosine kinase activity of the insulin receptor, magnesium directly affects glucose transporter protein activity 4 (GLUT4) and helps regulate the translocation of glucose into the cell (9).

As the duration of diabetes increases, increasing renal losses, chronic diarrhea associated with autonomic neuropathy, and malnutrition may predispose to the emergence of hypomagnesemia in type 2 diabetes. Ramadas et al. (21) found that hypomagnesemia occurs as the duration of diabetes increases and is associated with poor control of diabetes, consistent with our study.

Our study especially draws attention to the increase of hypomagnesemia in FMS. As the duration of diabetes increases, the incidence of FMS and hypomagnesemia increases. In addition, there is a negative relationship between serum magnesium levels and HbA1c. As the duration of type 2 diabetes increases, awareness and detection of FMS and hypomagnesemia will contribute to the treatment approach of both diabetes mellitus and FMS. Conducting more clinical studies on this subject will illuminate the relationship between disorders with similar clinical symptoms.

REFERENCES

1. Wolfe F, Smythe HA, Yunus MB, Robert M. Bennett RM, Bombardier C ,Goldenberg DL The American College of Rheumatology 1990 Criteria for the Classification of

Fibromyalgia. Report of the Multicenter Criteria Committee Arthritis Rheum. 1990; 33(2): 160-72.

2. Marcus DA, Deodhar A. Fibromyalgia Definition and Epidemiology Fibromyalgia A Practical Clinical Guide. 2011: 9-21.

3. Tishler M, Smorodin T, Vazina-Amit M, et al. Fibromyalgia in diabetes mellitus. Rheumatol Int. 2003; 23: 171–3.

4. Patucchi E, Fatati G, Puxeddu A, et al. Prevalence of fibromyalgia in diabetes mellitus and obesity. Recenti Prog Med. 2003; 94:163–5.

5. Şerife Mehlika Kuşkonmaz. Musculoskeletal Problems in Diabetic Patients,Düzce medıcal journal 2016; 18(1): 30-34.

6. Andretta A, Batista ED, Madalozzo ME, et al. Relation between magnesium and calcium and parameters of pain, quality of life and depression in women with fibromyalgia. Adv Rheumatol. 2019; 59(1): 1-6.

7. Fatima J , Jain V , Priya S,et all..Fibromyalgia Linked to Uncontrolled Diabetes Mellitus and Hypomagnesemia. journal of ınternal medıcıne of ındıa.2018; 12(3): 19-25.

8. American Diabetes Association (ADA), Standards of Medical Care in Diabetes, Diabetes Care. 2013 1; (36): 11-66.

9. Gröber U, Schmidt J, Kisters K. Magnesium in Prevention and Therapy. Nutrients. 2015; 7(9): 8199-226.

10. Martinez-Lavin M. Biology and therapy of fibromyalgia: Stress, the stress response system, and fibromyalgia. Arthritis Res Ther. 2007; 9: 216.

11. Eva L. Feldman, Brian C. Callaghan, Rodica Pop-Busui. Diabetic neuropathy Nat Rev Dis Primers. 2019; 5(1): 41.

12. Bădescu L,Bădulescu O, Ciocoiu M, et all. Modulation of neuropathic pain in experimental diabetes Mellitus J Physiol Biochem. 2014; 70(2): 355-61.

13. Iqbal Z, Azmi S, Yadav R et all. Diabetic Peripheral Neuropathy: Epidemiology, Diagnosis, and Pharmacotherapy.Clinical Therapeutics.2018 ;40 (6): 828-49.

14. Sayın S, Sayın S, Bursalı B, Bilen İpek H. Tip 2 diyabet hastalarında anksiyete ve depresyon riski ve ilişkili faktörler. Cukurova Med J 2019; 44(2): 479-485.

15. Ramalanjaona G. Magnesium in the of fibromyalgia. Altern Med Alert. 2002; 5(3): 29-32

16. Crosby V, Elin RJ, Twycross R, Mihalyo M, Wilcock A. Magnesium. J pain symtom manag. 2013; 45(1): 137-44.

17. Jameson JL. Endocrinology and metabolism. In: Fauci AS, Braunwald E, Kasper DL, et al, editors. Harrison's principles of internal medicine. 17th ed. New York: McGraw-Hill Medical; 2008. pp: 2372-3.

16. Crosby V, Elin RJ, Twycross R, Mihalyo M, Wilcock A. Magnesium. J pain symtom manag. 2013; 45(1): 137-44.

18. Moorkens G, Manuel-y-Keenoy B, Vertommen J, Meludu S, Noe M, De Leeuw Magnesium deficit in a sample of the Belgian population presenting with chronic fatigue. Magnes Res. 1997; 10: 329-37
19. Palmer BF, Clegg DJ, Electrolyte and Acid-Base Disturbances in Patients with Diabetes Mellitus. N Engl J Med. 2015; 373: 548–59.

20. Mısırlıoğlu MA, Hüseyin Erdal H, Oğuzhan Özcan O, et all The Relationship Between Serum Magnesium Level and Glycemic Regulation and Proteinuria in Diabetic Patients Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi 2020; 7 (2): 157 -161

21. Ramadass S, Basu S, Srinivasan AR. Serum magnesium levels as an indicator of status of Diabetes Mellitus type 2. Diabetes Metab Syndr . 2015; 9(1): 42-5.

SÖZEL 14

ANAPHLAXIA-LİKE ABDOMINAL AORTIC ANEURYSM RUPTURE 1,2

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Mengücek Gazi Eğitim ve Araştırma Hastanesi

Introductıon: In general, an arterial aneurysm is defined as localized arterial dilatation ≥50% of its normal diameter. The anteroposterior diameter of the aorta in the infrarenal region is about 2 cm. Enlargements larger than 3 cm are considered Abdominal Aortic Aneurysm (AAA). AAA is the most common aneurysm. Mortality rate due to rupture of AAA is about 85-90%. It is 5 times more common in men than women. Over the age of 50, the risk of rupture increases with age. AAA should be considered in patients presenting with abdominal pain, chest pain, back pain, shock and syncope.

Case: A 79-year-old male patient with no known disease other than hypertension woke up in the morning with the complaint of pain starting from the abdomen and radiating to the back. While the patient was waiting for his pain to go away by taking painkillers, he was taken to the district state hospital by his relatives because of weakness and feeling unwell. Upon detection of facial swelling, uvula edema, and hypotension in the examination, he was referred to our center with anaphylactic shock due to the use of painkillers. When the patient came to the emergency room, his general condition was moderate-bad, his consciousness was confused, his blood pressure was: 80/40 mmHg, the pulse: 110 beats/min, and his oxygen saturation: 88%. In his physical examination, there was uvula edema, respiratory sounds were equal bilaterally and no pathological sound was heard. On abdominal examination, there was no obvious defense or rebound, but tenderness was present. It is thought that there may be other pathologies behind the anaphylactic shock that developed after analgesics. In the anamnesis of the patient, the reasons that led the patient to take painkillers were considered, after the information that he had taken painkillers due to abdominal pain and back pain towards the morning. While investigating conditions that may cause abdominal pain and hemodynamic disorders, thoracic and abdominal angio computed tomography imaging was performed with the preliminary diagnosis of aortic dissection and aneurysm rupture (Figure 1). The patient, who was found to have ruptured AAA on radiological imaging, was transferred to the Cardiovascular Surgery clinic.

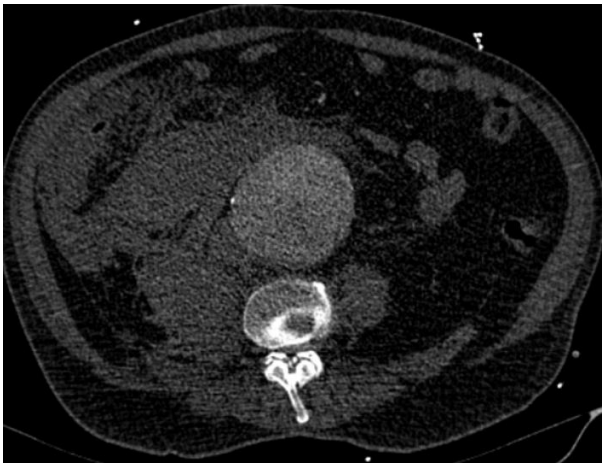
Figure 1: Abdominal Aortic Aneurysm Rupture

Conclusion: AAA is one of the rare surgical emergencies. Early diagnosis can be life-saving because of its high mortality and morbidity, rapid diagnosis and surgical repair. Although another clinical situation came to the forefront as in this case, we wanted to emphasize the importance of enlightening the patient's clinic by considering the rupture of the AAA in the differential diagnosis by experienced emergency medicine physicians.

Key Words: Aortic Aneurysm, Abdominal Aortic Aneurysm Rupture, Emergency Medicine

SÖZEL 15

Incidental Vacuum Disc Phenomenon in a Patient Presenting Due to Fall: A Case Report

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Abstract

Objective: The vacuum disc phenomenon is defined as the introduction of gas into the degenerative disc spaces. It can cause back pain.

Case: A 71-year-old female patient was admitted to the emergency department due to a fall on her back from the same level. On physical examination, there was pain

and tenderness in the lumbar region. There was no neurological deficit. As a result of the patient's lumbar computed tomography, diffuse degeneration of the discs and vacuum phenomenon in the discs were detected. The patient, who was learned to have low back pain for a long time, was discharged after neurosurgery outpatient control.

Discussion: Although disc degeneration often causes vacuum disc phenomenon, trauma, compression fractures due to malignancies, spinal surgical procedures, spinal injection and osteonecrosis are other causes. Computed tomography is also a radiological diagnosis that can be detected in 25-46%. Our case also had lumbar diffuse degenerative disc degeneration. It was learned that our patient also had low back pain for a long time, independent of trauma. Conservative approach is usually sufficient for treatment. As a result; It should not be forgotten that the vacuum disc phenomenon may be the cause of low back pain, which is frequently encountered in emergency services.

Key Words: Fall, Low back pain, Vacuum disc phenomenon

INTRODUCTION

Gases in the surrounding tissues from cracks that often occur in degenerative intravertebral discs can accumulate in this area with the effect of negative pressure. It can also be placed in the vertebra or spinal space by various mechanisms. This picture is called the vacuum disc phenomenon. It can cause severe low back pain in patients, especially if it causes root compression. Computed tomography is the most sensitive method in diagnosis.

In this case report, we aimed to present the vacuum disc phenomenon that we detected in a patient who came to our emergency department due to trauma.

CASE

A 71-year-old female patient was admitted to the emergency department due to a fall on her back from the same level. The vital signs of the patient were normal in the examination. On physical examination, there was pain and tenderness in the lumbar region. He had no neurological deficit. As a result of the patient's lumbar computed tomography, diffuse degeneration of the discs and vacuum phenomenon in the discs were detected. In addition, separation of the old fracture was observed in the left transverse process of the L5 vertebra (Figure 1). No additional pathology was found in the patient's follow-up in the emergency department. The patient, who was learned to have low back pain for a long time, was discharged with neurosurgery outpatient control.

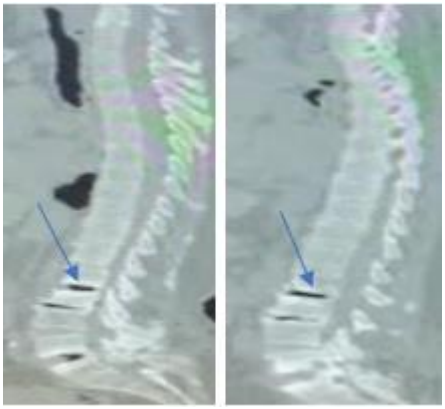

Figure 1. Gas Appearance Between Intervertebral Disc in Lumbar Vertebral Tomography; Vacuum Disc Phenomenon (Blue Arrow

DISCUSSION

Although the vacuum disc phenomenon is often the cause of disc degeneration, trauma, compression fractures due to malignancies, spinal surgery, spinal injection and osteonecrosis are other causes. It has been determined that 90-95% of this gas accumulated in the discs consists of nitrogen and the other part consists of oxygen and carbon dioxide. Computed tomography is also a radiological diagnosis that can be detected in 25-46%. Our case also had lumbar diffuse degenerative disc degeneration. In addition, we think that the presence of an old process fracture and trauma may also be in the etiology. It was diagnosed incidentally in the tomography taken with the preliminary diagnosis of lumbar vertebral fracture. While it can often cause low back pain in patients, gas passing into the spinal canal can cause root compression. It was learned that our patient also had low back pain for a long time independent of trauma. As a treatment, a conservative approach is sufficient in the vacuum disc phenomenon, which is generally a benign condition. Rarely, surgical treatment can be considered in these patients.

Conclusion; It should not be forgotten that the vacuum disc phenomenon may be the cause of low back pain, which is frequently encountered in emergency services.

REFERENCES

1. Ayberk G, Özveren MF, Yıldırım T. Spinal gas accumulation causing lumbar discogenic pain: A case report. Acta Orthop Traumatol Turc. 2015; 49(1): 103-105.
2. Durgun HM, Özhasenekler A, Önder H, Orak M, Üstündağ M. Vacuum Phenomenon. JAEMCR 2013; 4: 68-69.

3. Yun SM, Suh BS, Park JS. Symptomatic Epidural Gas-containing Cyst from Intervertebral Vacuum Phenomenon. Korean J Spine. 2012; 9(4): 365-368.
4. Kumaran SP, Gupta K, Singh SS. A rare association of spontaneous pneumorrhachis with spondylolisthesis and lumbosacral vacuum phenomenon: A case report with review of literatüre. Neurol India. 2011; 59(1): 120-121.

SÖZEL 16

Our Early Treatment Experiences in Acute Stroke

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Abstract

Objective: Stroke is a disease that causes significant morbidity and mortality. The aim of this study was to evaluate the treatment results of patients who were brought to our emergency department for acute stroke and underwent thrombectomy and thrombolysis.

Method: A total of 33 patients were included in the study. Clinical, demographic and radiological information obtained from the patients were recorded. Qualitative data were expressed as n, %.

Results: 48.5% of the patients were male (n=16). The mean age of the patients was 60.03±11.2 years. MCA in 25 patients (75%), and cerebral vein thrombosis in 1 patient (3%). 24 of the patients were discharged. 4 of them died.

Discussion: 51.5% of the patients were predominantly female. While these findings were similar to the thrombolytic therapy study conducted by Demir et al. in terms of mean age, the rate of male patients was higher in Demir et al. in terms of gender distribution. This may be due to regional differences and patient selection. In our study, the rate of MCA involvement was 75%. In the study of Akpınar et al., the MCA rate was affected by 100%. Differences in statistical data may be due to the limited number of studies and the differences between the centers of the patients who received treatment.

Conclusion: According to our study results, thrombectomy treatment causes significant improvement in patients' NIHSS scores and clinics.

Key Words: Acute cerebrovascular disease, Emergency, Thrombectomy

INTRODUCTION

Stroke is a disease that causes significant morbidity and mortality. It places heavy burdens on society and finances as it causes long-term disability. With the latest treatment methods, satisfactory results can be obtained if the patient is caught within the first 4.5-6 hours.

The aim of this study was to evaluate the treatment results of patients who were brought to our emergency department for acute stroke and underwent thrombectomy and thrombolysis.

MATERIAL and METHOD

This study was performed in acute stroke patients admitted to Ankara Numune Training and Research Hospital Emergency Department between 2017-2018. A total of 33 patients were included in the study. Clinical, demographic and radiological information obtained from the patients were recorded. Qualitative data were expressed as n, %. Quantitative data were expressed as mean±standard deviation, interquartile range. The distribution of continuous data was checked with the Kolmogorov-Smirnov test. NIHSS scores before and after treatment were compared with the Wilcoxon test. $p<0.05$ value was considered statistically significant.

RESULTS

We had 33 patients included in our study. 48.5% of the patients were male (n=16) and 51.5% were female (n=17). The mean age of the patients was 60.03±11.2 years.

The distribution of tomographic findings of the patients was as follows. Bacillary artery thrombosis was present in 1 patient (3%), ICA in 7 patients (21%), MCA in 25 patients (75%), and cerebral vein thrombosis in 1 patient (3%). 24 of the patients were discharged. 5 of them were admitted to intensive care. 4 of them died. Thrombectomy was performed in 31 patients, and thrombectomy+thrombolysis was performed in 2 patients. There was a statistically significant difference between pre- and post-treatment NIHSS scores. The median score before treatment was 14, while the post-treatment score was 8.

DISCUSSION

In our study, the mean age was 60.03±11.2 years. 51.5% of the patients were predominantly female. While these findings were similar to the thrombolytic therapy study conducted by Demir et al. in terms of mean age, the rate of male patients was higher in Demir et al. in terms of gender distribution. This may be due to regional differences and patient selection. In our study, the rate of MCA involvement was

75%. In the study of Akpınar et al., the MCA rate was affected by 100%. Differences in statistical data may be due to the limited number of studies and the differences between the centers of the patients who received treatment. In our study, 33 patients underwent emergency neurologic procedures. However, only 2 of them received thrombolytic therapy. Again, thrombectomy was performed together with these two patients. In a study conducted in the USA in 2008, only 3.5% of stroke patients could be given thrombolytic therapy. In our study, this rate was 6.06%. The reason why this rate was higher in our study may be the establishment of stroke centers in our country and the preparation for interventional and thrombolytic treatment.

CONCLUSION

According to our study results, thrombectomy treatment causes significant improvement in patients' NIHSS scores and clinics. Mortality and morbidity can be reduced by expanding stroke centers.

REFERENCES

1. AHA/ASA. Highlights From the 2018 Guidelines for the Early Management of Patients With Acute Ischemic Stroke. professional. heart.org. https://professional.heart.org/idc/groups/ahamahpublic/@wcm/@sop/@smd/documents/downloadable/ucm_498645.pdf. Published January 25, 2018. Accessed January 30, 2018.
2. Demir AB, Sarıdaş F, Taşkapılıoğlu Ö, Nas ÖF, Hakyemez B, Bakar. Intra-Arterial Thrombolytic Therapy İn Acute İschemic Stroke: Uludag University Medical Faculty Neurology Clinic Experience. Turkish Journal of Cerebrovascular Diseases. 2016; 22(1): 13-17.
3. Topçuoğlu MA, Arsava EM, Özdemir AÖ, Gürkaş E, Örken DN, Öztürk Ş. Intravenous Thrombolytic Therapy in Acute Stroke: Problems and Solutions. Turk J Neurol. 2017; 23: 162-175.
4. Akpınar ÇK, Gürkaş E, Aytaç E, Çalık M. Mechanical Thrombectomy for Minor Stroke Patients (NIHSS<6) with Large Vessel Occlusion. Turkish Journal of Cerebrovascular Diseases 2018; 24 (2): 67-70.

SÖZEL 17

ISCHEMIC STROKE IN A COVID-19 PATIENT

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Abstract

The novel coronavirus disease - 2019 (COVID-19) caused by the virus called SARS-CoV-2was encountered for the first time in the city of Wuhan in China in December 2019, and it was declared as a global pandemic accompanied by viral pneumonia by the World Health Organization in March 2020. COVID-19 is a contagious disease that primarily affects the respiratory system. COVID-19 symptoms are not always limited to the respiratory tract, and multiple neurological symptoms have been reported. In our study, we aimed to report a case of COVID-19 who presented with ischemic stroke, which is among the neurological complications that may develop in relation to COVID-19. The 65-year-old male patient presented to the emergency service with complaints of loss of strength in his left arm and left leg that started 6 hours ago. In the radiological imaging examinations of the patient, the result of his computerized brain tomography was normal. There were bilateral infiltrative zones in his thoracic computerized tomography (COVID-19 pneumonia). In the brain diffusion magnetic resonance imaging of the patient, acute infarction was observed in the watershed zone of the right middle cerebral artery. While COVID-19 has many systemic and neurological complications, cerebrovascular diseases are also among these neurological complications. Especially in COVID-19 patients presenting to emergency services with neurological complaints, ischemic strokes should be considered among the pre-diagnoses.

Keywords: Covid-19, neurological complaints, ischemic stroke

Introduction

The novel coronavirus disease - 2019 (COVID-19) caused by the virus called SARS-CoV-2was encountered for the first time in the city of Wuhan in China in December 2019, and it was declared as a global pandemic accompanied by viral pneumonia by the World Health Organization in March 2020 (World Health Organization (WHO), 2020). COVID-19 is a contagious disease that primarily affects the respiratory system (Mia Elhidsi, Prasenohadi, Dicky Soehardiman, 2021). The most frequently encountered symptoms of COVID-19 are fever, dry cough and fatigue. Other

possible symptoms include shortness of breath, hemoptysis, sore throat-chest pain, phlegmy cough, loss of appetite, stomachache, nausea, vomiting, diarrhea and headache. In more severe cases, pneumonia, acute respiratory failure, cardiac problems and multiorgan failure can be observed (Rothan HA, Byrareddy SN, 2020; Pascarella G, Strumia A, Piliego C, Bruno F, Del Buono R, Costa F, et al., 2020). Moreover, COVID-19 symptoms are not always limited to the respiratory tract, and multiple neurological symptoms have been reported (Mao L, Wang M, Chen Sh, He Q, Chang J, Hong C, et al., 2020). Additionally, the presence of conditions like headache, nausea, vomiting, myalgia, dizziness and hyposmia in patients infected with SARS-CoV-2 may indicate neurological involvement (Montalvan V, Lee J, Bueso T, De Toledo J, Rivas K, 2020). In our study, we aimed to report a case of COVID-19 who presented with ischemic stroke, which is among the neurological complications that may develop in relation to COVID-19.

Case

The 65-year-old male patient presented to the emergency service with complaints of loss of strength in his left arm and left leg that started 6 hours ago. According to the neurological examination of the patient, the left lower and upper extremity strength values of the patient were 3/5. The vital signs of the patient were determined as temperature: 36.3°C, heart rate: 82/min, BP: 145/94mmHg, respiratory rate: 20/min, oxygen saturation: 95%. The patient had a history of hypertension, and he was in the 7th day following his COVID-19-positive diagnosis. The patient who was hospitalized due to COVID-19 had been discharged 2 days ago. After the patient's physical examination, blood tests and radiological imaging were requested for the patient. The blood test results of the patient came out aslymphocyte count: 0.53 10^3/uL (normal range 0.6-3.4 10^3/uL), CRP (C-reactive protein): 3.97 mg/dl (normal range 0-0.5 3.97 mg/dl) and d-dimer: 19.1 µg FEU/mL (normal range 0-0.55 µg FEU/mL). Additionally, the platelet count of the patient at his first hospitalization was 86 10^3/uL (normal range 142-424 10^3/uL). His other blood parameters were normal. The ECG of the patient showed a normal sinus rhythm, and his troponin value was negative. In the radiological imaging examinations of the patient, the result of his computerized brain tomography was normal. There were bilateral infiltrative zones in his thoracic computerized tomography (COVID-19 pneumonia) (Figure-1). In the brain diffusion magnetic resonance imaging (MRI) of the patient, acute infarction was observed in the watershed zone of the right middle cerebral artery (MCA) (Figure-2). The patient was referred to the neurology and infectious diseases departments based on his COVID-19-positive status for consultation. The patient was transferred to the COVID-19 intensive care unit. The patient, who was

hospitalized for 6 days, was discharged with recommendations after his monitoring and treatments.

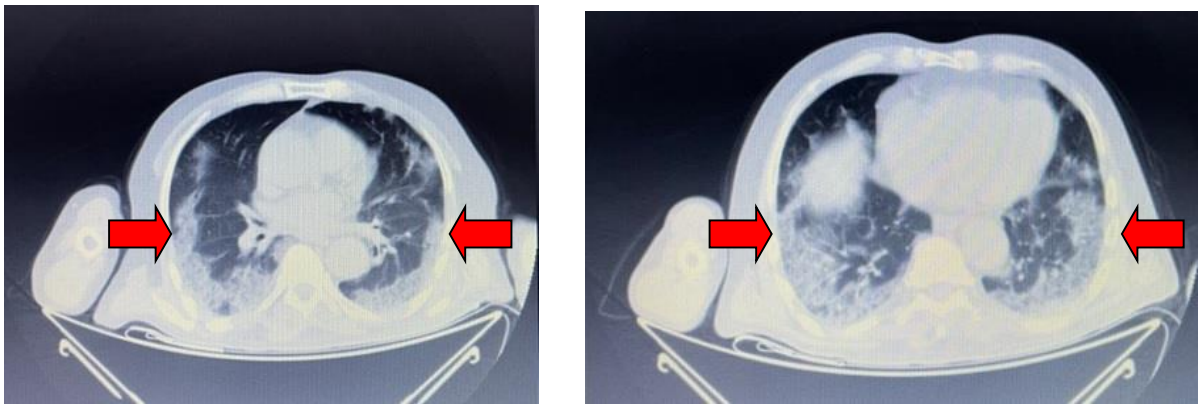

Figure-1: Bilateral COVID-19 pneumonia

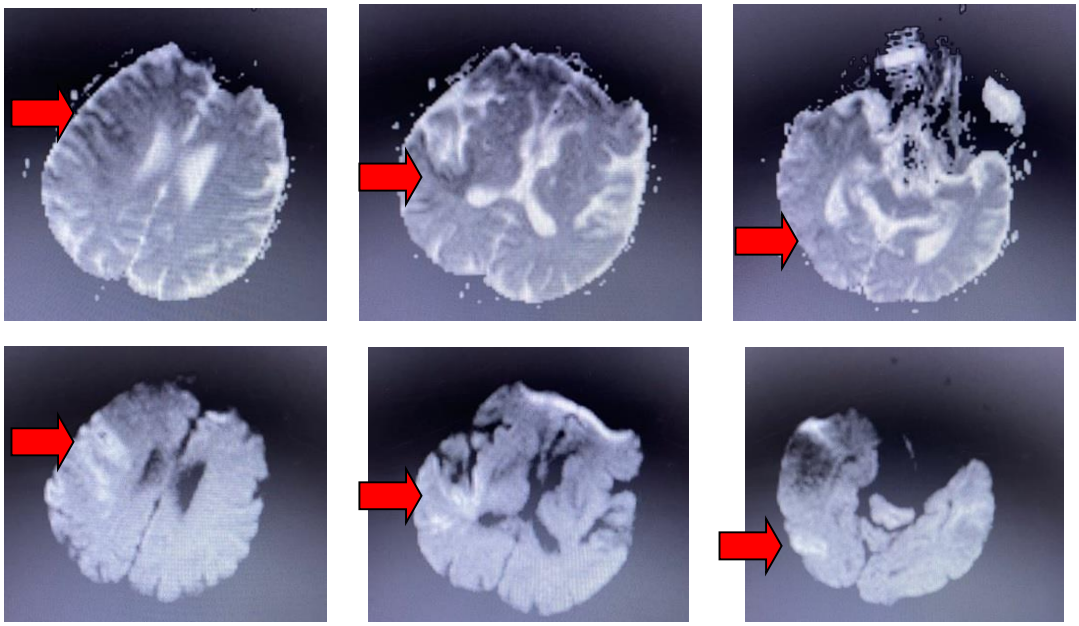

Figure-2: Acute infarction in the watershed zone of the right MCA

Discussion

The expected COVID-19-related clinical picture covers a broad spectrum from asymptomatic infection to septic shock and multiorgan failure, and the severity of the disease is categorized in three groups as the mild, moderate and severe stages (Şimşekoğlu R, Tombul T, 2020). In the mild clinical picture that covers the vast majority of COVID-19 cases (81%), symptoms like dry cough, non-persistent fever, nasal congestion, headache, mild dizziness, muscle pain and mild diarrhea are observed. In moderate-severity COVID-19 cases, respiratory symptoms are more

intense, and these may be accompanied by tachypnea and persistent fever. In severe cases, severe pneumonia symptoms, signs of acute respiratory distress syndrome (ARDS), sepsis and septic shock findings are observed (Hassan SA, Sheikh FN, Jamal S, Ezeh JK, Akhtar A, 2020). Gastrointestinal, urinary, cardiological and neurological involvement related to COVID-19 infection may also be encountered. The involvement of systems other than the respiratory system is mostly observed at the severe stage of the disease (Mao L, Jin H, Wang M, Hu Y, Chen S, He Q et al., 2020).

In a case series reported from Wuhan in China, 214 patients (88 severe cases and 126 mild cases) were examined, and neurological symptoms were found in 78 patients (36.4%). The rates of neurological symptom presence were found as 40 patients (45.5%) in the severe disease group and 38 patients (30.2%) in the mild disease group. The researchers reported the respective rates of acute cerebrovascular diseases as 5 (5.7%) and 1 (0.8%), impaired consciousness as 13 (14.8%) and 3 (2.4%) and skeletal muscle injury as 17 (19.3%) and 6 (4.8%) (Neurologic Manifestations of Hospitalized Patients With Coronavirus Disease 2019 in Wuhan, China). In our case, we diagnosed the COVID-19 patient with an acute cerebrovascular disease (ischemic stroke). In another study including a case series with 221 COVID-19 patients conducted by Li et al., acute ischemic stroke in 11 patients, sinus vein thrombosis in 1 patient and hemorrhagic stroke in 1 patient were reported (Li M, Wang M, Zhou Y, Sapozhnikov S, Dandu V, Toom S. et al., 2020). In these patients, thrombocytopenia and increased fibrinogen and d-dimer levels were associated with coagulopathy secondary to the COVID-19 infection (Li M, Wang M, Zhou Y, Sapozhnikov S, Dandu V, Toom S. et al., 2020). Our case also had thrombocytopenia, lymphopenia and increased d-dimer levels.

While the most prevalent symptoms observed in COVID-19-infected patients are fever, cough, loss of appetite and diarrhea, the most frequently encountered neurological symptoms were listed as dizziness, headache and impaired consciousness (Karadeli HH, Keskin N, 2020). Ischemic infarction zones observed in COVID-19 are usually detected in the watershed zones of large blood vessels and have a high tendency to be encountered in multiple blood vessel watershed zones (Beyrouti R, Adams ME, Benjamin L, Cohen H, Farmer SF, Goh YY, et al., 2020). Five severe stroke cases (NIHSS 17 on average) in patients under the age of 50 presenting with large vessel occlusion were reported in the city of New York, and the COVID-19 tests of all of these patients were positive (Oxley TJ, Mocco J, Majidi S, Kellner CP, Shoirah H, Singh IP, et al., 2020). In our patient, acute infarction was present in the watershed zone of the right MCA.

Conclusion

While COVID-19 has many systemic and neurological complications, cerebrovascular diseases are also among these neurological complications. Especially in COVID-19 patients presenting to emergency services with neurological complaints, ischemic strokes should be considered among the pre-diagnoses.

References

Beyrouti R, Adams ME, Benjamin L, Cohen H, Farmer SF, Goh YY, et al. Characteristics of ischaemic stroke associated with COVID-19. J Neurol Neurosurg Psychiatry 2020;0:1–4. doi:10.1136/jnnp-2020-323586.

Hassan SA, Sheikh FN, Jamal S, Ezeh JK, Akhtar A. Coronavirus (COVID-19): A Review of Clinical Features , Diagnosis , and Treatment. Cureus. 2020;12(3).

Karadeli HH, Keskin N. Covid-19 Ve Nörolojik Belirtiler. Medical Research Reports 2020;3(1):49-56.

Li M, Wang M, Zhou Y, Sapozhnikov S, Dandu V, Toom S. et al. Acute cerebrovascular disease following CO- VID-19 : a single center , retrospective , observational study. The Lancet. 2020;19.

Mao L, Jin H, Wang M, Hu Y, Chen S, He Q et al. Neurologic Manifestations of Hospitalized Patients With Coronavirus Disease 2019 in Wuhan, China. JAMA Neurol. 2020; published online.

Mao L, Wang M, Chen Sh, He Q, Chang J, Hong C, et al. Neurological Manifestations of Hospitalized Patients with COVID-19 in Wuhan, China: A Retrospective Case Series Study (February 24, 2020).

Mia Elhidsi, Prasenohadi, Dicky Soehardiman. Spontaneous Pneumothorax in Severe COVID-19 Pneumonia: Interventional Treatment and Risk of Transmission. Respir Case Rep 2021;10(1): 8-11 DOI: 10.5505/respircase.2021.58224.

Montalvan V, Lee J, Bueso T, De Toledo J, Rivas K. Neurological Manifestations of COVID- 19 and Other Coronavirus Infections: A Systematic Review. Clin Neurol Neurosurg . 2020 May 15;194:105921. doi: 10.1016/j. clineuro.2020.105921.

Neurologic Manifestations of Hospitalized Patients With Coronavirus Disease 2019 in Wuhan, China.

Oxley TJ, Mocco J, Majidi S, Kellner CP, Shoirah H, Singh IP, et al. Large-Vessel Stroke as a Presenting Feature of Covid-19 in the Young. N Engl J Med. 2020 May;382(20):e60.

Pascarella G, Strumia A, Piliego C, Bruno F, Del Buono R, Costa F, et al. COVID-19 diagnosis and management: a comprehensive review. J Intern Med 2020. doi: 10.1111/joim.13091.

Rothan HA, Byrareddy SN. The epidemiology and pathogenesis of coronavirus disease (COVID19) outbreak. J Autoimmun. 2020;109:102433. doi: 10.1016/j. jaut.2020.102433.

Şimşekoğlu R, Tombul T. Covid-19 Pandemic and Neurological Manifestations. Anatolian Clinic Journal of Medical Sciences, January 2020; Volume 25, Special Issue 1, 246-51.

World Health Organization (WHO). Clinical management of severe acute respiratory infection (SARI) when covid19 disease is suspected: Interim guidance. Available from: https://www.who.int/emergencies/diseases/novelcorona virus-2019 Accessed date: March 14 2020.

SÖZEL 18

ORF DISEASE

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Abstract

Orf is a zoonotic disease caused by parapoxvirus and usually seen in people who come into contact with animals such as sheep and goats. Lesions are often seen as maculopapules and on the hands. On average, the lesion changes at regular intervals every week. The diagnosis is mostly made by the history of contact and the

appearance of characteristic lesions. It can heal in 4 to 6 weeks without treatment; however, antibiotics should be used when secondary infections develop. In addition, cryotherapy, antiviral agents, excision and curettage methods are also applied.

Keywords: Orf, erythema multiforme, zoonotic

Introduction

Orf (ecthyma contagiosum) is a zoonotic diseaset hat is endemic in the world, caused by Parapoxvirus from the Poxviridae family. It can be transmitted to humans by the direct bite of animals such as sheep or goats or by contact with their contaminated saliva (Haig DM, Mercer AA, 1998). Orf is usually seen as solitary nodules on the dorsal surface of the hand, fingers, arms and rarely on the face (Gürel MS, Özardalı I, Bitiren M, 2003). The first lesion detected is a red, small and firm maculopapular lesion that occurs 3-10 days after contact. It then turns into a target-like nodule with a bulla on it, surrounded by a red center and a white ring. Later, a thin crust and small papillomas appear on this nodule. Within 6-8 weeks, a thins car forms at the lesion site and heals spontaneously (McCabe D, Weston B, Storch G, 2003). The disease often resolves spontaneously in 4-6 weeks without treatment. In addition, antiviral agents such as cryotherapy, cidofovir, idoxuridine and imiquimodare used in the treatment of orf (Schmidt E, Weissbrich B, Brocker EB, Fleischer K, GoebelerM,Stich A, 2006). The diagnosis of the disease is based on clinical findings, histological examination and detection of virus DNA. However, the diagnosis is usually made by the history of contact and the appearance of characteristic lesions (Turan E, Yurt N, Erdemir AT, Gürel MS, 2012). In this article, a case of orf disease with erythema multiforme, lymphangitis and bullous pemphigoid lesions is presented.

Case

A 33-year-old male patient came to our emergency department with a bullous raised lesion in his hand and pain in the same arm (Figure-1). The patient, who is a veterinarian, said that he was bitten by a cow for 15 days. At first, there was only a superficial open wound at the bite site. After 1 week, raised lesions began to form at and around the bite site. He tried to clean his wounds by rubbing hard with disinfectant 4 days ago. He came to the emergency room with the complaint of pain that started from his hand and spread to his shoulder. Laboratory tests results were normal. Antibiotics and analgesics were given intravenously. The patient was consulted to an infectious diseases specialist and was diagnosed with Orf's disease. Oral antibiotic treatment was started because he had lymphangitis, a secondary

bacterial infection. The wound healing status of the patient, who did not come to the outpatient clinic after discharge, could not be learned.

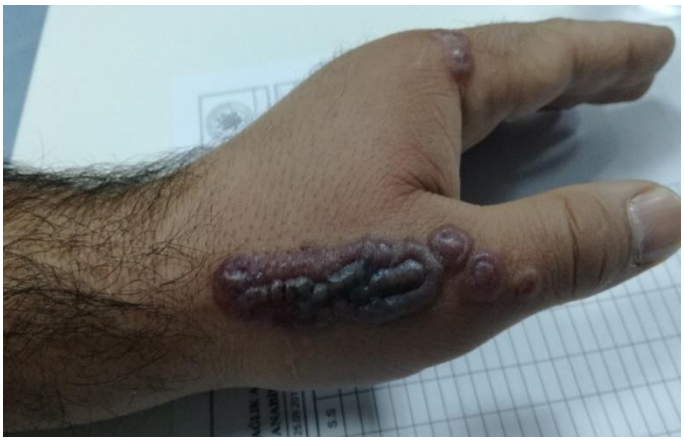

Figure-1: Orf lesion on the back of the hand

Dıscussıon

The incidence of the disease increases after Eid al-Adha and in the spring and summer months (Bayındır Y, Bayraktar M, Karadağ N, Ozcan H, Kayabas U, Otlu B et al., 2011). Groups at risk for orf disease are butchers, slaughter house workers, veterinarians, laboratory workers and cold meatpackers (Petersen BW, Damon IK, 2015).

In the differential diagnosis, skin anthrax, pyodermagangrenosum, tularemia, milkman's nodules, herpetic cirrhosis, abscess, fungal infections or pyogenic granuloma should be considered (Gürel MS, Özardalı I, Bitiren M, 2003). Anthrax, which is the most complicated disease, starts as a painless but itchy papule, then a black necrotic crust forms in the middle with edema around it. The diagnosis is made by clinical findings, histological examinations and detection of the causative virus DNA. Orf disease includes secondary bacterial infections, lymphadenopathy, lymphangitis, erysipelas, diffuse papulovesicular eruption of the oral mucosa and skin, ocular and perianal localization, erythemamultiforme and bullous pemphigoid (Ozturk P, Sayar H, Karakas T, Akman Y, 2012). Alian et al.reported that rare complications such as erythemamultiforme and bullous pemphigoid may ocur after orf. After the healing of Orf's disease, there is noscar (Alian S, Ahangarkani F, Arabsheybani S, 2015; Sahin A, Namiduru M, Karaoglan I, 2017). Hand hygiene should be given importance as well as knowing the ways of transmission in prevention.

Conclusion

We should also consider for disease among our preliminary diagnosis in patients who are infected as a result of being bitten by animals such as sheep, goats and cows.

References

Alian S, Ahangarkani F, Arabsheybani S. A case of orf disease complicated with erythema multiforme and bullous pemphigoid-likeeruptions. Case Rep Infect Dis.2015; 2015:105484.

Bayındır Y, Bayraktar M, Karadağ N, Ozcan H, Kayabas U, Otlu B et al. Investigation and analysis of a human orf outbreak among people living on the same farm. New Microbiol. 2011; 34(1): 37-43.

Gürel MS, Özardalı I, Bitiren M. Fasyalorf. Türkiye Klinikleri Tıp Bilimleri Dergisi. 2003; 23(5): 412-5.

Haig DM, Mercer AA. Ovine diseases. Orf Vet Res. 1998; 29(3-4): 311-26.

McCabe D, Weston B, Storch G. Treatment of orf poxvirus lesion with cidofovir cream. Pediatr InfectDis J. 2003; 22(11): 1027-8.

Ozturk P, Sayar H, Karakas T, Akman Y. Erythemamultiforme as a result of orfdisease [Letter]. Acta Dermatovenerologica Alpina Pannonica et Adriatica. 2012; 21(2): 45–6

Petersen BW, Damon IK. Poxviruses that infecthumans: parapoxviruses (includingorfvirus), molluscumcontagiosum, and yatapoxviruses. In: Bennett JE, Dolin R, Blaser MJ, eds. Mandell, Douglas and Bennett's Principles and Practice of Infectious Disease. 8th ed. Philadelphia, PA: Elsevier Saunders, 2015: 1703-6.

Sahin A, Namiduru M, Karaoglan I. Three Complicated Orf Cases. Klimik Journal. 2017; 30(2), 90-93.

Schmidt E, Weissbrich B, Brocker EB, Fleischer K, GoebelerM,Stich A. Orf followed by erythemamultiforme. J Eur Acad Dermatol Venereol. 2006; 20(5): 612-3.

Turan E, Yurt N, Erdemir AT, Gürel MS. Fasiyalorf. Turk J Dermatol. 2012; 6(2): 58-60.

SÖZEL 19

A RARE CAUSE OF DIPLOPIA: WEBINO

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Abstract

Wall-eyedbilateral INO (WEBINO) syndrome is characterized by bilateral adduction disorder, nystagmus in the abducting eyes, and primary gaze exotropy. Any lesion with bilateral damage to the medial longitudinal fasciculus (MLF) can result in WEBINO. There may be many different causes in the etiology. However, the most common cause of WEBINO is multiple sclerosis. The 43-year-old male patient we presented was admitted to the emergency department with diplopia and exotropy. Brain and cervical magnetic resonance imaging revealed a demyelinating plaque in the mesencephalontegmentum, which explains the current clinic. With 7 days of pulsesteroid therapy, the patient's complaints were almost completely resolved.

Keywords: Gaze paralysis, webino, pulsesteroid

Introduction

Conjugate eye movements are made with the normal functioning of the bilateral third, fourth and sixth cranial nerves and the interneurons of these nerves extended inside the medial longitudinal fasciculus (MLF). Horizontal eye movements, on the other hand, are made with the stimulation of the abducens nucleus inside the paramedian pontine reticular formation (PPRF) (Frohman TC, Petzold A, Frohman EM).

Horizontal eye movement disorders caused by brainstem lesions are divided into three groups as lateral gaze palsy, internuclear ophthalmoplegia and one-and-a-half syndrome. Lateral gaze palsy is caused by a lesion involving PPRF or the abducens nucleus (Bae YJ, Kim JH, Choi BS, Jung C and Kim E, 2013). Internuclear ophthalmoplegia (INO) is a gaze anomaly characterized by the adduction impairment of the affected eye and nystagmus during the abduction of the contralateral eye. It occurs in the presence of lesions involving the tegmentum of the brainstem and affecting MLF (Frohman EM, Zhang H, Kramer PD, Fleckenstein J, Hawker K, Racke MK et al., 2001). One-and-a-half syndrome (a combination of lateral gaze palsy and internuclear ophthalmoplegia) is caused by a lesion affecting

both PPRF (or the ipsilateral abducens nucleus) and the ipsilateral MLF simultaneously (Bae YJ, Kim JH, Choi BS, Jung C and Kim E, 2013).

In this article, we are presenting a case of wall-eyed bilateral INO (WEBINO) which is a very rate cause of diplopia and originates from a demyelinating plaque in the brainstem, as well as its management.

Case

The 43-year-old male patient presented to the emergency service with complaints of sensitivity in the eye, blurred and double vision for the last 3 days. In his neurological examination, impaired adduction in both eyes and nystagmus in the abduction of both eyes were observed, skew deviation was present, exotropia was observed for botheyes, his deep tendon reflexes (DTRs) were active, and TCR bilateral flexion was encountered (Figure-1). No acute pathology was detected in the patient's brain computerized tomography (CT) imaging or diffusion magnetic resonance imaging (MRI) results. Based on the findings in the examinations, the patient was hospitalized in the neurology clinic with the diagnosis of wall-eyed bilateral INO (WEBINO). In the contrast brain and cervical MRI, non-enhancing demyelinating plaques, including two juxtacortical, one in the mesencephalon and one in the C3-4 segment, were observed (Figure-2). The clinical picture of WEBINO was explained by the demyelinating plaque in the tegmentum of the mesencephalon. The CSF oligoclonal band (OCB) checked for the etiology of the demyelinating disease was assessed as pattern 1 (meaning normal). The patient's serum anti-myelinoligodendrocyteglycoprotein (anti-MOG) and serum aquaporin 4 receptor antibodies were determined to be negative. Pulse steroid treatment in the form of 1 g methylprednisolone was provided to the patient for 7 days. In his last neurological examination, while the patient's impairment in the adduction of the right eye had partially recovered, his impairment in the adduction of the left eye had recovered copmletely (Figure-3). The patient was recommended follow-up regarding seronegative MOG-associated diseases (MOGAD) and OCB-negative multiplesclerosis (MS) diagnoses.

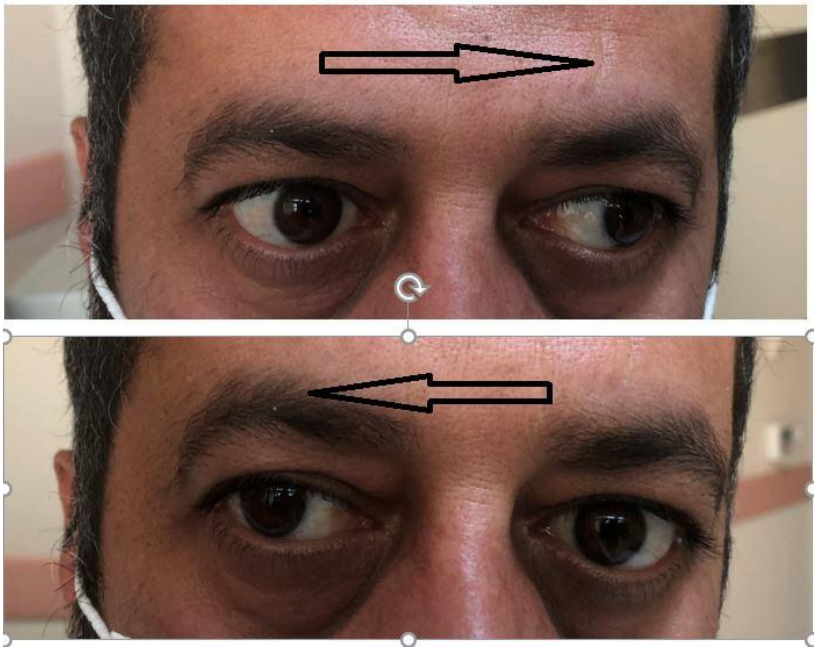

Figure-1: Impaired adduction in both eyes, skew deviation and exotropia

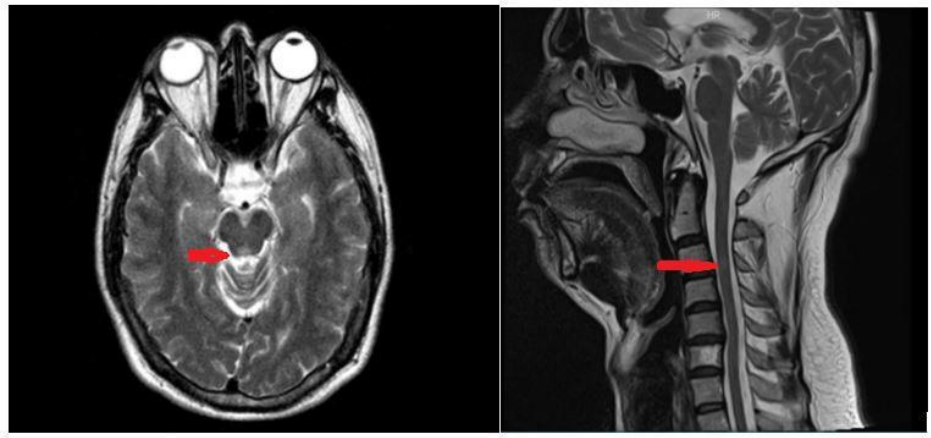

Figure-2: Non-enhancing demyelinating plaques in the mesencephalon and C3-4 segment

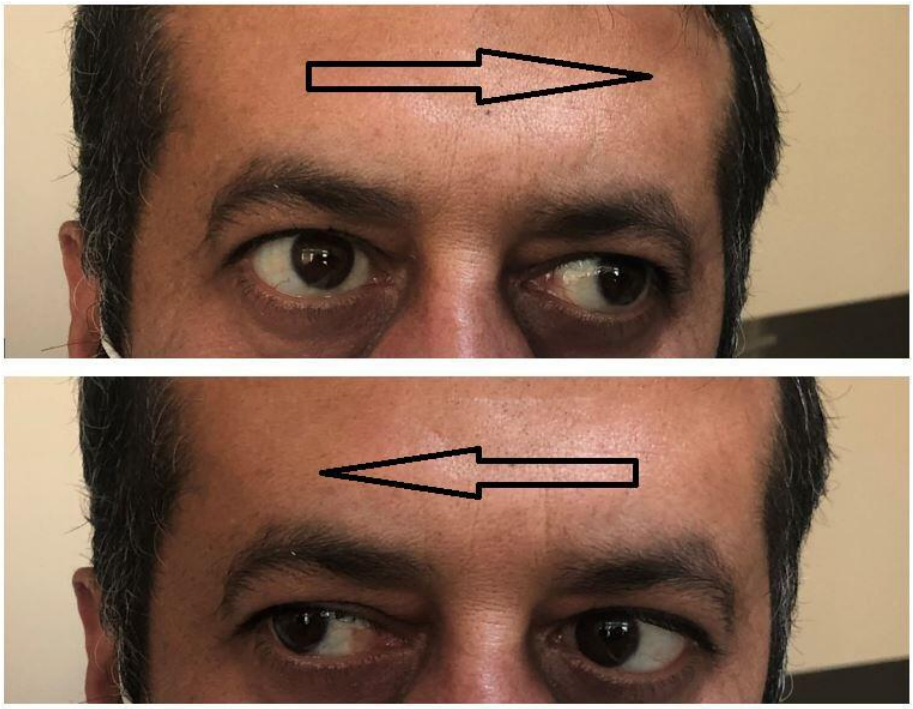

Figure-3: Impairment in the adduction of the right eye had partially recovered and of the left eye has recovered completely

Discussion

Wall-eyedbilateral INO (WEBINO) syndrome is characterized by bilateral adduction impairment, nystagmus in the eyes during abduction and primary gaze exotropia (Vázquez-Justes D, Martín-Cucó A, Gallego-Sánchez Y, Vicente-Pascual M, 2020). WEBINO is a form of internuclear ophthalmoplegia (INO) that has similar pathophysiology and etiologies (Wu YT, Cafiero-ChinM, Marques C, 2014).Any lesion that damages the medial longitudinal fasciculus (MLF) bilaterally can result in WEBINO. The nature of the lesion may be many different causes including ischemic, autoimmune (multiple sclerosis), infectious, inflammatory, toxic, metabolic, nutritional and traumatic causes. Different studies have reported that the most prevalent cause of unilateral INO cases is brainstem ischemia, but the most prevalent cause in WEBINO is multiple sclerosis (MS) (Wu YT, Cafiero-ChinM, Marques C, 2014).MS constitutes about one-third of all INO cases, and it is the most frequently encountered etiology in young patients. In MS-diagnosed INO patients, 73% are bilateral cases (Keane JR, 2005). The retrospective study conducted in 2005 by Keane is the largest and most recent study investigating the forms of internuclear ophthalmoplegia and the etiologies of these. Their study revealed that 101 among 188 WEBINO patients had multiple sclerosis, while 21 had ischemia (Keane JR, 2005). Our case was associated with a demyelinating plaque in the tegmentum of the mesencephalon, and he was

monitored for MS as his MRI findings were not fully compatible with MS. There is no study on the prognosis of WEBINO in the literature. In the study by Eggenberg et al., while the prognosis of INO was good in patients with small lesions, it was poorer in patients with accompanying additional neurological symptoms (e.g., ataxia, vertigo, facial paralysis) (Eggenberger E, Golnik K, Lee A, Santos R, Suntay A, Satana B et al., 2002). In patients who are not recovering despite such treatments, botulinum toxin injection and surgical operations can be performed (Wu YT, Cafiero-ChinM, Marques C, 2014). A previous study reported that with botulinum toxin injection administered to 16 INO patients (13 WEBINO, 3 unilateral INO) with different etiologies, 15 of these 16 patients showed symptomatic recovery in terms of diplopia (Murthy R, Dawson E, Khan S, Adams GG, Lee J, 2007). Another study presented findings showing that the experimental administration of dalfampridine (4-aminopyridine; fampridine), which is a potassium channel blocker, to three patients with demyelinating diseases improved axonal function (Serra A, Skelly MM, Jacobs JB, Walker MF, Cohen JA, 2014). In our case, near-complete recovery was observed in diplopia and gaze palsy with the pulse steroid treatment administered for 7 days.

Conclusion

Although WEBINO is a rare cause of diplopia, it is seen more frequently in patients with a diagnosis of a demyelinating disease. Diagnosis can be made easily with the appropriate MRI methods especially in young patients presenting to emergency services with complaints of diplopia and exotropia. With this article, we aimed to draw attention to our finding that the prognosis can be better with treatments that are started in the early period, especially in patients with demyelinating etiologies.

The necessary permission was obtained from the patient for the publication of the images.

References

Bae YJ, Kim JH, Choi BS, Jung C, Kim E. Brainstem Pathways for Horizontal Eye Movement: Pathologic Correlation with MR Imaging. Radio Graphics 2013; 33:47– 59. Doi: e 10.1148/rg.331125033.

Eggenberger E, Golnik K, Lee A, Santos R, Suntay A, Satana B, Vaphlades M, et al. Prognosis of ischemic internuclear ophthalmoplegia. Ophthalmology 2002; 109: 1676–1678.

Frohman EM, Zhang H, Kramer PD, Fleckenstein J, Hawker K, Racke MK, Frohman TC. MRI characteristics of the MLF in MS patients with chronic internuclear ophthalmoparesis. Neurology 2001;57(5):762.

Frohman TC, Petzold A, Frohman EM. Internuclear ophthalmoparesis. https://www.uptodate.com/contents/internuclear-ophthalmoparesis/print? search= webino&source=search_result&selectedTitle=1~1&usage_type=default&display_rank =1

Keane JR. Internuclear ophthalmoplegia: unusual causes in 114 of 410 patients. Arch Neurol 2005; 62: 714–717.

Murthy R, Dawson E, Khan S, Adams GG, Lee J. Botulinum toxin in the management of internuclear ophthalmoplegia. J AAPOS 2007; 11: 456–459.

Serra A, Skelly MM, Jacobs JB, Walker MF, Cohen JA. Improvement of internuclear ophthalmoparesis in multiple sclerosis with dalfampridine. Neurology 2014 Jul;83(2):192-4. Epub 2014 Jun 6.

Vázquez-Justes D, Martín-Cucó A, Gallego-Sánchez Y, Vicente-Pascual M. WEBINO syndrome (wall-eyed bilateral internuclea ophthalmoplegia) secondary to ischemic stroke, about a case. Arch Soc Esp Oftalmol (EnglEd). 2020 Apr;95(4):205-208. doi: 10.1016/j.oftal.2019.12.012.

Wu YT, Cafiero-ChinM, Marques C. Wall-eyed bilateral internuclear ophthalmoplegia: review of pathogenesis, diagnosis, prognosis and management. Clinical and Experimental Optometry 2014; 98(1): 25–30. doi:10.1111/cxo.12200.

SÖZEL 20

A CASE OF ACUTE ICHEMIC CEREBROVASCULAR STROKE BROUGHT TO EMERGENCY DEPARTMENT WITH DARP DECLARATION

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Keywords: assault, cerebrovasculer acute stroke, ischemia, thrombectomy, acute stroke

INTRODUCTION

Forensic cases are frequently encountered in emergency services, and battered reports and trauma patients constitute an important part of them. Sometimes, much more important organic causes are detected and acute events can be encountered in patients who are declared as forensic cases or isolated assaults by the patient or the health personnel who brought the patient. Acute ischemic cerebrovascular stroke (CVS) is also a frequent reason for admission to the emergency services, and its prompt and accurate management in the emergency department is of great importance for the patient, their relatives, physicians and the health system. In this article, we will talk about a case who was brought with him with a bloody stick with a statement of being beaten by 112 personnel and was urgently taken to thrombectomy with the diagnosis of acute ischemic svo in our emergency department.

CASE PRESENTATION

A 36-year-old male patient was brought to the emergency room by the 112 team with a statement of beating and alcohol consumption. A bloody stick was brought along with the patient by the 112 team. When the patient came, he was conscious. Glasgow coma score was 14. At the beginning of the examination, there was an intense smell of alcohol. Arterial blood pressure: 145/78 mmHg, pulse: 64/min, fever: 36.6 C, spO2: 96%, fingertip blood glucose: 128 mg/dl. On physical examination, edema and hematoma on the right cheek, edema and redness on the right forehead, and a 2 cm superficial smooth-edged incision on the left forehead were observed. There was widespread redness and pain in both shoulders, arms and back. In his neurological examination, muscle strength was measured as 4/5 in the left upper and lower extremities. No features were found in other system examinations. In the thirtieth minute of the follow-up, the patient's neurologic examination was unremarkable. His muscle strength was measured as 3/5 in the left upper and lower extremities, and central facial asymmetry was detected. After the examination findings, which were thought to be due to posttraumatic effects and musculoskeletal origin, changed in the control examination, the possibility of an

acute neurological event was started to be investigated in the patient, and the relevant branches were consulted. An acute infarct area was detected in the right MCA in the patient who underwent emergency Cerebral CT angiography upon the recommendation of the neurologist, and he was urgently taken to mechanical thrombectomy by the neurologist. On the first day after thrombectomy, it was learned that the patient's gx was 15, his left muscle strength was 4/5, and the patient's facial asymmetry decreased.

DISCUSSION AND CONCLUSION

Developing a uniform view based on the history of the event in forensic cases brought by a personal application in emergency services or by 112 may cause acute serious organic pathologies to be overlooked. In particular, before associating the examination findings with the apparent cause as in this case, it is necessary to remember the possible organic causes, repeat the examinations, and turn to the necessary tests. It should never be forgotten that forensic cases may have organic medical pathologies independent of the injury mechanism, except for isolated assault, trauma, traffic accident, and work accident. Evaluating each patient individually, deepening the anamnesis, repetitive effective physical examinations, making preliminary diagnoses and examining him will both prevent mistakes and facilitate the patient's access to the fastest and most effective treatment.

REFERANCES

1. Arch, A. E., Weisman, D. C., Coca, S., Nystrom, K. V., Wira III, C. R., & Schindler, J. L. (2016). Missed ischemic stroke diagnosis in the emergency department by emergency medicine and neurology services. Stroke, 47(3), 668-673.
2. Brown, D. L., Lisabeth, L. D., Garcia, N. M., Smith, M. A., & Morgenstern, L. B. (2004). Emergency department evaluation of ischemic stroke and TIA: the BASIC Project. Neurology, 63(12), 2250-2254.
3. Boyle, A., Robinson, S., & Atkinson, P. (2004). Domestic violence in emergency medicine patients. Emergency medicine journal: EMJ, 21(1), 9.
4. Riviello, R. (2009). Manual of forensic emergency medicine. Jones & Bartlett Publishers.

5. Demircan, A., Keleş, A., Guerbuez, N., Bildik, F., Aygencel, Ş. G., DOĞAN, N. Ö., ... & Akar, T. (2008). Forensic emergency medicine-six-year experience of 13823 cases in a university emergency department. Turkish journal of medical sciences, 38(6), 567-575.

SÖZEL 21

EVALUATION OF THE DEVELOPMENT OF CONTRAST-INDUCED NEPHROPATHY IN ADULT PATIENTS WHO HAVE CONTRAST-ENHANCED COMPUTED TOMOGRAPHY IN THE EMERGENCY DEPARTMENT

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Introduction

Radiological examinations and cardiovascular interventions utilizing intravascular iodinated contrast media are being widely applied for both diagnostic and therapeutic purposes. İodinated contrast media(CM) improve definition and visualization of anatomic structures, particularly the blood vessels. In addition to the benefits of iodinated contrast agents in diagnostic and interventional interventions, they also have certain side effects and complications. The most important complication is contrast-induced nephropathy (CIN) due to the use of contrast media(1). CIN is one of the most common causes of acute renal failure (ARF). Studies have reported that 13% of all ARF cases develop secondary to the use of CM, and CIN is the third most common cause among in-hospital ARF cases (2).

CIN is defined as an acute worsening of renal function after intravascular administration of contrast media when other causes are excluded. The serum creatinine levels begin to increase within 24-48 hours, peak at 2-3 days and return back to the baseline levels within 2 weeks. The most common definition of CIN is an increase of 25% or more, or an absolute increase of 0,5 mg/dl or more in serum creatinine from baseline value, at 48–72 h following the exposure to CM (3,4). In studies, the rate of CIN was found to be between 12-26% in patients with pre-existing renal dysfunction and diabetes who did not apply standard hydration protocols (5). Lower rates (3.3%) have been reported in patients who do not have

these risks (5). Identification of patients at high risk for the developmentof CIN is of major importance. Non-modifiable risk factors include pre-existent renal insufficiency, diabetes mellitus, older age, reduced left ventricle systolic function, advanced heart failure, acute myocardial infarction, and shock, while volume and type of CM, concomitant use of nephrotoxic medications, hypotension, dehydration, hypoalbuminemia, anemia, and the use of intra-aortic balloon pump (IABP) represent the modifiable risk factors for CIN (6).

The most important risk factors belonging to the patient is known kidney failure and diabetes mellitus (6). Chronic renal failure is defined as a serum creatinine concentration above 1.4mg/dl or pre-existing kidney failure, and a glomerular filtration rate (GFR) of 60 ml/min/1.73m2 for more than 3 months with kidney damage (7). There is a direct relationship between the basal serum creatinine level and the development of CIN (6). Creatinine clearance is also an important marker in the occurrence of CMN. McCullough et al. (8) reported that as creatinine clearance decreases from 50 ml/min to 10 ml/min, the probability of developing CIN requiring dialysis increases in both diabetic and non-diabetic patients. The incidence of CIN in diabetic patients has been defined as 5-30%. In these high-risk patients, the development of clinically significant nephropathy occurs in patients with underlying renal failure. As a result, the coexistence of known diabetes and kidney failure in the same patient is accepted as the most important risk factor for CIN (9).

The objectives of this observational study were to determine the incidence of CIN at our centre, following an emergency intravenous contrast-enhanced computed tomography and to analyse overall changes in laboratory parameters of kidney function and their variation in relation to different risk factors.

Materials and methods

This was a prospective cross-sectional observation study which included the patients who underwent intravenous contrast-enhanced computed tomography performed in the emergency department. All the patients were evaluated as per a proforma which included the demographic details, clinical history and diagnosis. A pre-procedure serum creatinine level was recorded. Patients who did not accept to participate in the study and whose kidney function tests were not requested before contrast-enhanced CT were excluded from the study. In addition, patients with the following criteria were excluded from the study during the study period were: patients who were hospitalized following their arrival in the ED, patients with impaired consciousness, patients who need emergency surgery and medical

intervention, major trauma patients, patients with alcohol and drug intoxication, patients with known kidney failure and urea and creatinine values found to be above the normal value range, patients with a history of kidney transplantation, intubated patients, patients who could not be reached by phone, did not come to the controls and could not be followed up for various reasons.

The phone numbers of the patients was obtained and they were called to re-admit 48 hours after their arrival to the emergency department. Control BUN and creatinine levels of these patients were measured and recorded on proforma.

Patients with an increase of more than 0.5 mg/dl in serum creatinine levels or a 25% or more increase in serum creatinine levels 48 hours after exposure to CM compared to baseline were defined as CIN.

Study data were analyzed by enrolling in the Statistical Package for the Social Sciences for Windows (SPSS) 15.0 program. Renal function tests of the patients before contrast agent administration and at 48th hour were compared. Contrast-induced renal failure was analyzed with patient-related factors such as age, gender, and comorbidities affecting renal function tests.

Results

In this prospective study, 69 patients who received intravascular iodinated contrast media during computed tomography were evaluated. Thirty-five (50.7%) of the cases were male and 34 (49.3%) were female. The mean age of the patients included in the study was 54.1±18.2 (median 57). 24 (34.8%) of the cases were 65 years old and over, 45 of them were younger than 65 years old. At least one comorbid disease was found in 30 (43.5%) of the patients included in the study.

The definition of CIN includes absolute (≥0.5mg/dl) or relative increase (≥25%) in serum creatinine at 48–72h after exposure to a contrast agent compared to baseline serum creatinine values, when alternative explanations for renal impairment have been excluded. According to this definition two different incidence occur. First incidence is %4,4 and the latter is %20,3. There is poor conformation between the two diagnostic methods (kappa=0.303).

There was no statistically significant difference in urea changes evaluated before and 48 hours after CM administration (p=0.717) (Table 1).

A statistically significant difference was found in creatinine levels after the administration of the CM (p=0.012) (Table 1).

Table 1. Renal function tests before and 48 hours after CM exposure

	Mean blood urea level ± SD	Mean serum creatinine level ± SD
Before CM	34,7±12,7	0,9±0,2
48th hour	35,7±14,9	0,9±0,3
P value	0,717	0,012

A statistically significant difference was found in the mean creatinine level at 48 hours in women compared to the mean before the CM (p=0.012). No statistically significant difference was found in the values before and after contrast agent in men.

In the study, the number of patients with an increase of 25% or more compared to the baseline serum creatinine level at the 48th hour was determined as 14 (20.3%). The number of patients with an increase of more than 0.5 mg/dl in serum creatinine levels after 48 hours was found to be 3 (4.3%). No significant difference was found when statistical analysis of patients who developed CIN was performed according to gender, age and additional disease status (Table 2).

Table 2. Distribution of patients with CIN according to gender, age and presence of comorbid disease

		CIN by 25% increase			CIN based on 0.5mg/dl increase		
		CIN+	CIN-	P value	CIN+	CIN-	P value
Gender	Man	5	30	0,208	1	34	0,614
	Woman	9	25		2	32	
Age	<65	9	36		2	43	
	65 years and older	5	19	0,935	1	23	1,0
Comorbid Disease	+	8	22		2	28	
	-	6	33	0,248	1	38	0,576

Discussion

Our study included 69 patients who met the inclusion criteria. CIN was defined as an increase of more than 0.5 mg/dl in serum creatinine levels or a 25% or more increase in serum creatinine levels 48 hours after exposure to CM. According to this definition, the incidence of CIN in our study was calculated at two different levels as 4.4% and 20.3%. In addition, there was a low degree of agreement between the two definitions (kappa: 0.303). This difference suggests that the definition in the literature may be an inadequacy. Another factor to explain this difference may be the inadequacy of the number of patients included in the study. Although the study was not a randomized controlled study, the fact that the ratio of females to males was equal, necessitates a review of the inclusion criteria.

In studies, the rate of CIN was found to be between 12-26% in patients who did not apply standard hydration protocols and who had pre-existing renal dysfunction and diabetes (5). Lower rates (3.3%) have been reported in patients who do not have these risks (5). However, it has not been clearly stated by which definition the incidence of CIN is determined in these studies. The incidence of CIN detected in our study was found to be similar to these rates when it was calculated only at a 25% increase rate compared to the basal serum creatinine level.

In a similar study (114 cases) conducted on patients admitted to the emergency department and investigating the frequency of CIN, no statistically significant difference was found between the basal serum creatinine level and the creatinine levels at the 48th hour after CM (10). In our study, unlike this situation, a statistically significant increase was detected between creatinine levels before and 48 hours after CM application. This suggests that the difference between the two studies may be due to the low number of cases, the difference in contrast material used and the patient population.

Mehram et al. (6) developed a scoring system that includes 8 clinical variables assessing the risk of CIN. In this scoring system, advanced age draws attention as one of the important risks. Of the 69 patients in our study, 24 (34.8%) consisted of patients aged 65 and over. Only 5 of the 14 cases who developed CIN were 65 years and older. This shows that advanced age does not make a statistically significant difference for the development of CIN (p=0.935).

When we evaluated the additional diseases separately, it was determined that none of them increased the development of CIN statistically. However, considering the difference between creatinine values before and after CM, a significant increase in creatinine was found in patients with hypertension (p=0.023). The necessity of more comprehensive studies to evaluate the role of hypertension in the development of CIN may be considered.

Conclusion

In our study, the incidence of CIN was found to be 20.3% according to the definition of 'creatinine level at the 48th hour following administration of CM by 25% or more compared to the basal serum creatinine level'. The presence of comorbid disease, age and gender do not pose a risk for the development of CIN. A significant increase in creatinine was found compared to the basal creatinine value in patients with female gender, presence of additional disease and hypertension.

Key Words: Emergency department, contrast media, contrast-induced nephropathy

References

1. Davenport M, Khalatbari S, Cohan R, Dillman J, Myles J, Ellis J. Contrast material---induced nephrotoxicity and intravenous low-osmolality iodinated contrast material: risk stratification by using estimated glomerular filtration rate. Radiology. 2013; 268:719---28.
2. McCullough PA, Wolyn R, Rocher LL, Levin RN, O'Neill WW. Acute renal failure after coronary intervention: incidence, risk factors, and relationship to mortality. Am J Med. 1997;103:368-75. doi: 10.1016/S0002-9343(97)00150-2
3. Persson PB, Hansell P, Liss P. Pathophysiology of contrast medium induced nephropathy. Kidney Int. 2005; 68:14-22. doi: 10.1111/j.1523-1755.2005.00377.x.
4. Guitterez NV, Diaz A, Timmis GC et al. Determinants of serum creatinine trajectory in acute contrast nephropathy. J Interv Cardiol 2002; 15: 349–354.
5. Solomon R, Werner C, Mann D, D'Elia J, Silva P. Effects of saline, mannitol, and furosemide on acute decreases in renal function induced by radiocontrast agents. N Engl J Med1994; 331:1416-20
6. R Mehran1 and E Nikolsky2. Contrast-induced nephropathy: Definition, epidemiology, and patients at risk. http://www.kidney-international.org & 2006 International Society of Nephrology
7. Kidney Disease Outcomes Quality Initiative. K/DOQI clinical practice guidelines for chronic kidney disease: evaluation, classification, and stratification. Am J Kidney Dis 2002; 39(2): S17-31.
8. McCullough PA, Wolyn R, Rocher LL, Levin RN, O'Neill WW. Acute renal failure after coronary intervention: incidence, risk factors, and relationship to mortality. *Am J Med*1997;103:368-75.

9. Parfrey PS, Griffiths SM, Barret BJ, Paul MD, Genge M, Withers J, et al. Contrast material-induced renal failure in patients with diabetes mellitus, renal insufficiency, or both: a prospective controlled studt. N Engl J Med 1989; 320(3):143-9,
10. Durukan P, Ozkan S, Ikizceli I, Vardar A, Ipekci A, Duman A Contrast-induced nephropathy risk due to emergency contrast-enhanced computed tomography. Department of Emergency Medicine, Erciyes University Medical School, Kayseri, Turkey.

SÖZEL 22

Uncontrolled Diabetes Due to Underlying Systemic Lupus Eritematosus: A Case Report

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Abstract

Introduction: Systemic Lupus Erythematosus (SLE) is a chronic inflammatory disease with systemic involvement. Many comorbidities are also encountered in SLE patients. Diabetes mellitus(DM) is the 3rd most common endocrine disease in patients with SLE. DM may develop subsequently or simultaneously with the disease or it can develop before SLE occurs.

Case: A 45 years old women with diabetes and hpyertension admitted to the emergency department wth high blood sugar levels. Her laboratory findirngs were ; blood glucose: 594 mg/dl, creatinine: 1,49 mg/dl, urea:56 mg/dl, CRP: 10 mg/dl. Sedimentation: 108 mm/h. Her urine examination showed leukocyturia, proetinuria and erythrocyturia. Urine culture showed no microorganism. Anti nuclear antibody was positive. Further examinations showed that there was an underlying lupus disease.

Discussion: SLE is associated with an increased risk of developing endocrine diseases. In some patients it can occur after Diabetes . Blood glucose regulation can be affected by many conditions, but is mostly impaired in the course of infectious and inflammatory diseases. Both Lupus and Diabetes are diseases in which kidney involvement is common. In some cases, like ours, lupus symptoms can be overshadowed by severe diabetic symptoms.

In this case report, we aimed to remind practitioners that all new symptoms and signs of diabetic patients should be examined in detail before deciding that they are due to diabetes.

Introduction

Systemic Lupus Erythematosus (SLE) is a chronic inflammatory disease with systemic involvement. Lupus disease, the cause of which is unknown, can present with a wide range of clinical findings, from mild joint findings to severe organ involvement and failure.

Non-insulin dependent diabetes mellitus is the most common cause of diabetes in adults. Although it may be asymptomatic initially, patients may present with symptoms such as hyperglycemia, fatigue, polydipsia, polyphagia, polyuria, weight loss or weight gain.

Although type 1 diabetes often accompanies autoimmune diseases, type 2 diabetes mellitus is also frequently encountered in the course of rheumatological diseases, and both diseases exacerbate each other (1).

Case Report

A 45 years old women with diabetes and hpyertension admitted to the emergency department wth high blood sugar levels. Her laboratory findirngs were ; blood glucose: 594 mg/dl, creatinine: 1,49 mg/dl, urea:56 mg/dl, C reactive protein (CRP): 10 mg/dl, sedimentation: 108 mm/h Haemoglobine:10,4 g/dl and urine examination showed leukocyturia, proetinuria and erythrocyturia. She hospitalized to the internal medicine servise for the treatment of urinary infection and hyperglysemia.

When her medical history was taken it was seen that she was under metformin, gliclazide, sitagliptin and irbesartan medications for the treatment of diabetes and hypertension. Her HbA1c level was 15,7. The patient was started on insulin infusion therapy. When blood glucose levels decreased below 250 mg/dl infusion were stopped and insulin aspart and insulin glargine therapy started. When earlier laboratory result were examined enteroccocus growth was seen in urine culture several times. Before she started intravenous ertapenem therapy empirically, urine culture were run. For renal dysfunction she was performed urinary ultrasonography; meanwhile parathormone, 25-OH vitamin D, blood gas analyses and blood electrolyte tests were run. Urinary ultrasonography showed no evidence besides than kidney stones bilaterally and other laboratory test results were in normal range. Although there was a slight decrease in CRP and sedimentation levels with

ertapenem treatment, they did not regress to normal levels. When urinar sample showed no microorgansims growth , antibiotic treatment were stopped. The sedimentation value was repeated for confirmation and since the results were 95 and 100mm/h, echocardiography, blood culture, thorax CT and sputum ARB tests were performed to investigate infective endocarditis and tuberculosis. Echocardiography and Thorax CT showed no evidence for endocarditis and tuberculosis, also blood culture and sputum ARB results were negative for growth. She was also went gastroesophagoscopy and colonoscopy to clarify the anemia and no pathological finding were found besides than antral gastritis. Thereupon, patient was evaluated for hematological and rheumatological diseases to clarify the sedimentation elevation. Anti-nuclear antibody(ANA), Romatoid Factor, C3-C4, Immunglobuline levels, peripheral blood smear tests were run. Peripheral blood smear showed no evidence besides than hypochromia in erythrocytes and immunglobuline levels were also in normal range. ANA was 1/80 positive and C3 levels were low. In line with these results, the patient was referred to a rheumatologist and after detailed examinations and evaluations she was diagnosed as SLE according to the SLICC 2019 criteria. Treatment for SLE was started immediately.

Discussion

Systemic lupus erythematosus is associated with an increased risk of developing an endocrine disease(2). There are many studies showing that the immun system and endocrine system are closely related to each other (3,4). Comorbidities accompanying SLE have been investigated many times in the literature and it has been reported that diabetes accompanies it at varying rates (1,5). In a literature review published in 2008, 485 patients with SLE were examined and the rate of concomitant diabetes was found to be 1.9% in these patients (1). In another literature rewiev which was published recently, 708 Lupus patients were examined to evaluate the occurance of endocrinopathies and it was shown that the most common endocrinological conditions which accompanying SLE were hypothyroidism, hyperthyroidism and type 2 diabetes. In the same rewiev 10 patients have shown to have diabetes and half of them were steroid-induced and rest of them were developed spontaneously or subsequently (2). In our patient SLE was diagnosed after diabetes. There may be several reasons of it. First of all most of her complaints may have been thought to be related to diabetes, since the patient missed her follow-ups and she didn’t use her medications regularly. Secondly practitioners probably attributed high sedimentation and CRP levels to frequent urinary tract infections due to kidney stone. The fact that renal biopsy

wasn’t performed on patient since it may have been thought that the impaired renal functions was also associated with diabetes may be another reason. In addition, there are some studies showing that angiotensin receptor blockers (ARB) treatments reduce proteinuria and albuminuria in patients with lupus nephritis(6,7). Irbesartan, which the patient was also using for the treatment of HT, may have caused the lupus nephritis findings to progress more slowly.

Conclusion:

It is known that endocrine diseases are common during the course of immunological diseases. Sometimes the findings of rheumatological diseases can be undershadowed by endocrine diseases progress with severe symptoms. We would like to emphasize that it is important to consider that there may be underlying rheumatological diseases, especially in diabetic patients whose blood sugar regulation cannot be achieved.

References

1- Cortes S, Chambers S, Jerónimo A, Isenberg D. Diabetes mellitus complicating systemic lupus erythematosus - analysis of the UCL lupus cohort and review of the literature. Lupus. 2008 Nov;17(11):977-80
2- Muñoz C, Isenberg DA. Review of major endocrine abnormalities in patients with systemic lupus erythematosus. Clin Exp Rheumatol. 2019 Sep-Oct;37(5):791-796. Epub 2019 Jun 6.
3- Procaccini C, Pucino V, De Rosa V, Marone G, Matarese G. Neuro-endocrine networks controlling immune system in health and disease. Front Immunol. 2014 Apr 7;5:143.
4- Jara LJ, Medina G, Saavedra MA, Vera-Lastra O, Torres-Aguilar H, Navarro C, Vazquez M, Espinoza LR. Prolactin has a pathogenic role in systemic lupus erythematosus. Immunol Res 2017; 65: 512-523.
5- Molina MJ, Mayor AM, Franco AE, Morell CA, López MA, Vilá LM. Prevalence of systemic lupus erythematosus and associated comorbidities in Puerto Rico. J Clin Rheumatol. 2007 Aug;13(4):202-4.
6- Tse KC, Li FK, Tang S, Tang CS, Lai KN, Chan TM. Angiotensin inhibition or blockade for the treatment of patients with quiescent lupus nephritis and persistent proteinuria. Lupus. 2005;14(12):947-52

7- Kanda H, Kubo K, Tateishi S et al. Antiprotienuric effect of ARB in lupus nephritis patients with persistent proteinuria despite immunosuppressive therapy. Lupus 2005; 143: 288–99.

SÖZEL 23

Non-Traumatic Hemorrhagic Cerebral Hemorrhage in A 30-Year-Old Male Patient

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Abstract
Hemorrhagic stroke is subdivided into parenchymal hemorrhage and subarachnoid hemorrhage (SAH). Non-traumatic subarachnoid hemorrhage (SAH) represents approximately 5–6% of all strokes. Morbidity and mortality rates remain high, but accurate diagnosis using clinical assessment and neuroimaging, critical care management, and early treatment using either surgical or interventional techniques have improved overall outcomes. In the United States over 30,000 patients experience SAH annually. In approximately 85% of cases, non-traumatic SAH is caused by a rupture of an intracranial aneurysm. In the remaining cases, causes of SAH include extension of a parenchymal hemorrhage, coagulopathy, or rupture of an arteriovenous malformation. Approximately 10% of patients with SAH do not have an aneurysm and show a pattern of blood on CT primarily surrounding the brainstem. These so-called “perimesencephalic” hemorrhages carry a benign prognosis, low recurrence, and may be caused by a venous rather than arterial bleeding source. In a minority of cases, the etiology is never discovered. In most cases SAH is a disease which is cataclysmic in both presentation and consequence. Carefully navigating a patient through this event maximizes the chance for survival and lowers the probability of disability. .(1,2,3,4,5)
Smoking and family history of aneurysmal subarachnoid hemorrhage (SAH) are independent risk factors for SAH. Current and past smoking has been consistently found to be associated with aneurysmal subarachnoid hemorrhage (SAH) and is considered to be the most significant modifiable risk factor for SAH.

Case

A 30-year-old male patient was divorced from his wife 6 months ago and has had depressive complaints such as headache, nausea, vomiting, weakness, anorexia during this period and is treated by a Psychiatrist for treatment purposes and using SSRI.
The patient was brought to our emergency department with a throbbing and blunt pain, malaise, dizziness, nausea and vomiting that spread from the back of the head to the front of the head for 3 days.
On the examination of the patient, GKS was 15. There was no loss of power. His consciousness was orientated and cooperated. The only pathology in the examination was unilateral babinski positivity.
The patient's TA: 180/100 mmHg, pulse 109 atm / min, Oxygen saturation was 97%, fever was 36.8.
The patient underwent blood abnormalities and radiological imaging. Symptomatic therapy was started. Hemorrhage SVH was present in the patient's tomography.
Conclusion
Intense headaches with acute onset - "worst ever" - are the classic onset of subarachnoid hemorrhage. However, only two out of every three people define the beginning in this way. Headaches can start slowly. However, a comprehensive medical history is not always sufficient to differentiate subarachnoid hemorrhage from other acute headache conditions (5). 20% of patients have had similar headache attacks in the past. (2,3,5)
Neck stiffness is a common symptom of subarachnoid hemorrhage, but the examination can be detected hours later. The absence of neck stiffness shortly after the onset of the disease does not exclude (1,4,8). Among the clinical symptoms in the patient. Acute confusion with headache, drowsiness and irritability, Nausea and vomiting, Seizures (seen in 10 - 50%). Such patients should also raise an unusually strong plastic headache. (1,4,8,11)
Subarachnoid hemorrhage or cerebral hemorrhage causes 3% of the entire stroke, and in four of the five cases the condition is caused by rupture of the intracranial aneurysm. (2,3,5,11)
Subarachnoid hemorrhage mortality is about 50%, and one in every three survivors has persistent neurological symptoms. It is very important that patients with suspected or proven subarachnoid hemorrhage are quickly referred to more diagnosis and treatment. (12, 13)
Its treatment is usually surgery, and rheumatic bleeding from aneurysm results in> 50% mortality and worsens prognosis for survivors. Prospective studies have shown that in the first 24 hours, four to six hours after the first bleeding, more than 10-15% re-bleeding (8h-10h). For the next four weeks, the risk is on average 1-2% per day.

The risk of re-bleeding from a non-ruptured aneurysm only after 3-12 months is equal to the risk of aneurysm never bleeding (11).
It was quite masking and misleading to diagnose the patient we detected at a young age, his consciousness, his treatment of depression, and his complaints of headache, nausea and vomiting for about 6 months. However, the positivity of the babinski in the patient has been quite a guide in the diagnosis of the patient. The patient was diagnosed with computed tomography and treated without delay.
References

1. Stevens, et al. The Role of Mechanical Ventilation in Acute Brain Injury. Neurol Clin. 2008:543–563. [PubMed] [Google Scholar]

2. Byyny, et al. Sensitivity of Noncontrast Cranial Computed Tomography for the Emergency Department Diagnosis of Subarachnoid Hemorrhage. Annals of Emergency Medicine. 51(6):697–703. [PubMed] [Google Scholar]

3. Molyneux, et al. Risk or recurrent subarachnoid haemorrhage, death, or dependence and standardized mortality ratios after clipping or coiling or an intracranial aneurysm in the International Subarachnoid Aneurysm Trial (ISAT): long-term follow-up. Lancet Neurol. 2009;8:427–33. [PMC free article] [PubMed] [Google Scholar]

4. Greving, et al. Cost-effectiveness of preventative treatment of intracranial aneurysms. Neurology. 2009;73:258–265. [PubMed] [Google Scholar]

5. Woo, et al. Smoking and family history and risk of aneurismal subarachnoid hemorrhage. Neurology. 2009;72:69–72. [PMC free article] [PubMed] [Google Scholar]

1x. Kissela BM, Sauerbeck L, Woo D, et al. Subarachnoid hemorrhage: a preventable disease with a heritable component. Stroke 2002;33:1321–1326. [PubMed] [Google Scholar]

2x. Broderick JP, Viscoli CM, Brott T, et al. Major risk factors for aneurysmal subarachnoid hemorrhage in the young are modifiable. Stroke 2003;34:1375–1381. [PubMed] [Google Scholar]

5. Landtblom AM, Fridriksson S, Boivie J et al. Sudden onset headache: a prospective study of features, incidence and causes. Cephalalgia 2002;22: 354–60.
8. Hillman J, Fridriksson S, Nilsson O et al. Immediate administration of tranexamic acid and reduced incidence of early rebleeding after aneurysmal subarachoid hemorrhage: a prospective randomized trial. J Neurosurg 2002; 97: 771–8.

10. Eide PK. The relationship between intracranial pressure and size of cerebral ventricles assessed by computed tomography. Acta Neurochir (Wien) 2003; 145: 171–9.
11. Winn HR, Richardson AE, Jane JA. The long-term prognosis in untreated cerebral aneurysms I. The incidence of late hemorrhage in cerebral aneurysm:a 10-year evaluation of 364 patients. Ann Neurol 1977; 1: 358–70.
12. Nornes H, Wikeby P. Results of microsurgical management of intracranial aneurysms. J Neurosurg 1979; 51: 608–14.
13. Guglielmi G, Viñuela F, Sepetka I et al. Electrothrombosis of saccular aneurysms via endovascular approach. Part 2: Preliminary clinical experience. J Neurosurg 1991; 75: 8–14.

SÖZEL 24

A case report of firearm bullet through into the corpus thoracic vertebrae (T6) without causing neurological deficit or vertebral bone destruction

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Objective

Vertebral and spinal cord injuries owing to firearms have a high rate of morbidity and mortality. Gunshot injuries are most commonly seen in young males and account for 13% to 17% of traumatic spinal injuries.(1) Most patients with spinal gunshot wounds (GSW) injury have complete neurological deficit.(2) But in this case we present a 19-year-old male patient with gunshot injury through into the corpus thoracic vertebrae (T6) with the bullet ending up and causing no neurulogicial deficit.

Method

An 19-year-old male patient was brought to the emergency department with gunshot injury. He was conscious and alert and his vital signs were within the normal range. Physical examination revealed one entry hole in the lateral right scapular region with no corresponding exit hole. No further injuries were found in the rest of the examination. The patient had no neurological or circulatory deficits.

Findings

Computer tomography (CT) imaging (Figure1) showed retained bullet in the left scapular region, (Figure 2) fracture in the left spinascapula and bilateral pneumothorax with pneumomediastinum. Owing to a normal neurological examination, conservative follow-up was.

Result

A bilateral chest tube was inserted and a total of 700 mL of bloody pleural fluid was drained. Post-procedure chest X-ray showed a significant reduction in the bilateral hemopneumothorax with adequate bilateral lung expansion.

Bullet entry holes were debrided and left to secondary healing. The patient was admitted and started on first generation cephalosporin and aminoglycoside prophylaxis. Neurological examination was repeated in regular intervals after admission and was found to be stable. Simple arm sling was prescribed for the scapular fracture.

The patient was discharged without any neurological deficit. In the routine follow-up examinations of the patient, he was found neurologically intact.

Keywords: vertebrae, firearm injuries

Figure 1

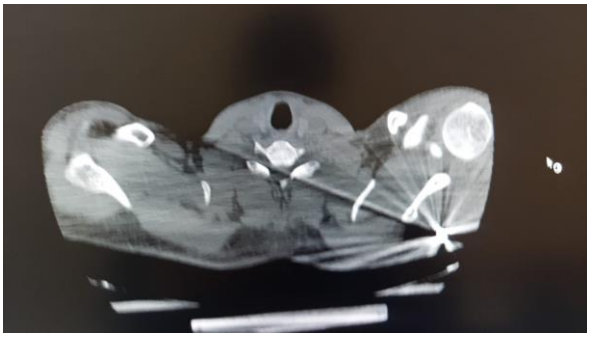
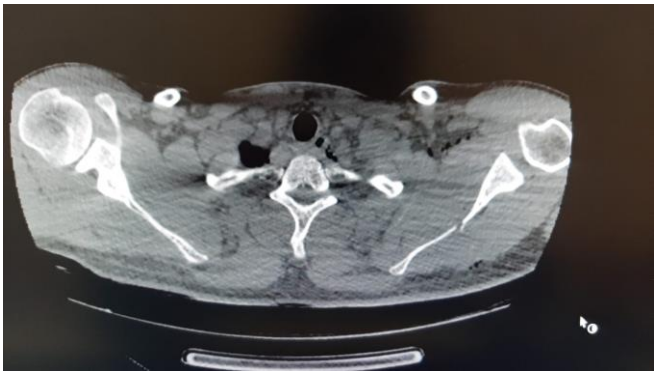


Figure 2



Referances

1) Sidhu GS, Ghag A, Prokuski V, Vaccaro AR, Radcliff KE. Civilian gunshot injuries of the spinal cord: a systematic review of the current literature. Clin Orthop Relat Res. 2013 Dec;471(12):3945-55. doi: 10.1007/s11999-013-2901-2. PMID: 23479233; PMCID: PMC3825909.

2) Mirovsky Y, Shalmon E, Blankstein A, Halperin N. Complete paraplegia following gunshot injury without direct trauma to the cord. Spine (Phila Pa 1976). 2005 Nov 1;30(21):2436-8. doi: 10.1097/01.brs.0000184588.54710.61. PMID: 16261122.

SÖZEL 25

Covid19 and Spontaneous Pneumothorax: Case Report

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OBJECTIVE:

Pneumothorax, which is life-threatening, presents with sudden respiratory distress and requires emergency intervention, can be observed in many patients, including healthy individuals.Thus, it will be emphasized that in cases of sudden respiratory distress in patients with Covid-19, pneumothorax may have developed in the patient.

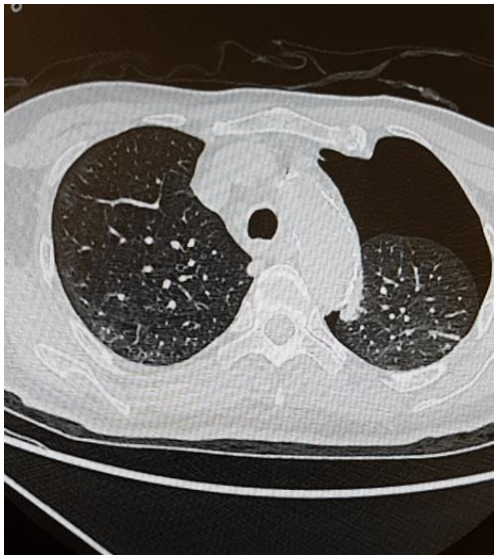
CASE REPORT:

Seventy-nine-year-old male patient was followed at home on the 2nd day of being positive in the Covid-19 pcr test; He was brought to the emergency room by his relatives with respiratory distress, nausea, vomiting, and changes in consciousness.Respiratory rate was 22/min and SO2: 80% in room air.In the physical examination, the left lung sounds were decreased by listening, and the lung computer tomography of the patient, who had no other features, large pneumothorax reaching 8 cm in thickness is observed in the left hemithorax. And the other tomography sign was peripherally located consolidation-ground glass areas in the right lung lower lobe, right lung middle lobe lateral cementum and posterobasal segment, and laterobasal segment. Underwater chest tube drainage was applied to the patient with pneumothorax. The patient, who was admitted to the intensive care unit, died on the second day after cardiac arrest.

CONCLUSION:

Pneumothorax, a rare but fatal complication of this disease, should be kept in mind especially in cases of sudden respiratory distress during the follow-up of COVID-19 patients.

Keywords: Covid 19, Respiratory distress, Spontaneous Pneumothorax



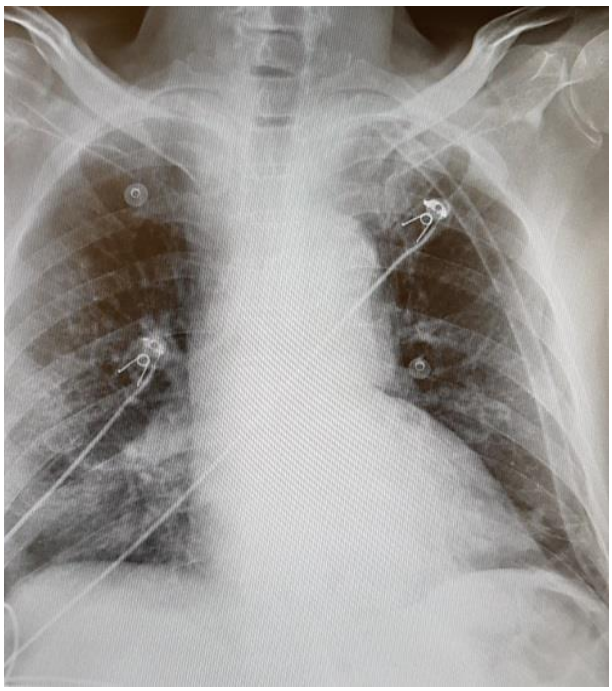


Figure1. Figure2.

SÖZEL 26

ELECTROBITE

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Abstract

Electricity becomes more and more involved in our lives and the incidence of electric shocks is increasing. Despite its high mortality and morbidity, Preventability of the electrical accidents increases the importance even more. The cause of mortality and morbidity is arrhythmia, trauma and organ damage.

According to US data, childrens are 10% of 17000 cases of electric shock per year with 1000 deaths. In children, the male/female ratio is in favor of males, and the most common source of electricity is sockets, electrical appliances and cables. Electrical burns around the mouth occur when children bite the electrical cables, and are frequently seen in the group under 3 years old.

Our case is a two-year-old girl was brought by her family with the statement that she had been electrocuted after biting the electric cable. Gingival burn was detected by physical examination,. Other system examinations were normal. EKG and laboratory tests were also normal. The patient was admitted to the Pediatrics Service for follow-up.

Inroduction

The first studies on the electricity go Thales of Miletus in the Ancient Greece, but Benjamin Franklin's kite experiment in 1752 is considered a milestone for the discovery of electricity. Benjamin Franklin is a writer, musician and scientist as well as a politician. He also invented the lightning rod during this kite experiments. Luigi Galvani demonstrated the connection of muscles and nerves with electricity in 1771. The control of the electricity was made possible by Alessandro Volta's invention, which dates back to 1799. Only 100 years later, electricity is now used in homes and businesses.

The incidence of electric shocks as occupational accidents in adults and home accidents in children is also increasing with the increasing inclusion of electricity in our lives in our homes and workplaces, [1]. Despite its high mortality and morbidity, the fact that it can be prevented further increases the importance of electrical accidents [1]. The cause of mortality and morbidity is arrhythmia, trauma and internal organ damage [2].

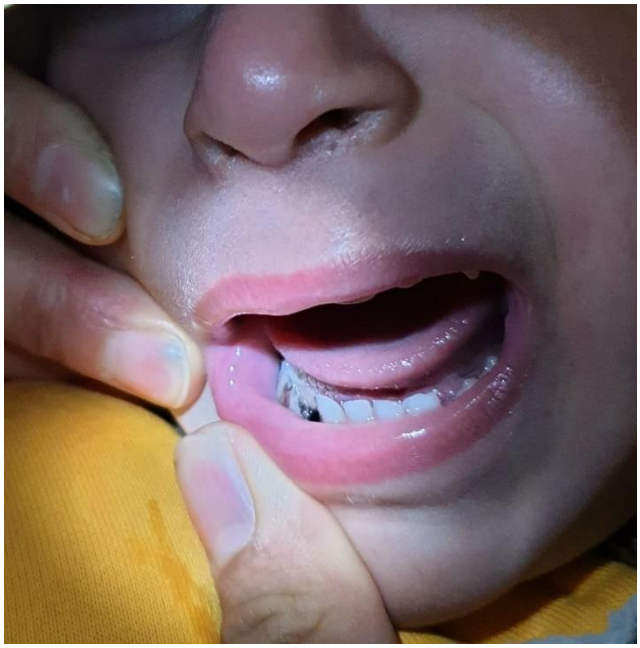
Case

A two-year-old girl was brought by her family with the statement that she had been electrocuted after biting the electric cable.

In his external examination, burns were detected on the right lower incisive and canine teeth. Other system examinations were normal.

Laboratory analyzes did not reveal any significant pathology other than leukocytosis and respiratory acidosis. ECG was also normal.

The patient was admitted to the Pediatrics Service for the follow-up and treatment.



Discussion

According to US data, childrens are 10% of 17000 cases of electric shock per year with 1000 deaths [1, 2]. In children, the male/female ratio is in favor of males, and the most common source of electricity is sockets, electrical appliances and cables [2].

The study conducted by Habip Almiş et al. at İnönü University in 2008-2013 showed that 57 pediatric patients who applied to the emergency department due to electric shock were mostly male and half of them were in the 7-12 age group. They determined the mortality rate as 5.26% and the burn formation rate as 45.5% [1].

A similar study conducted in Ankara in Dr. Sami Ulus Gynecology and Child Health Hospital in 2005-2015 indicates that for 58 patients, the female/male ratio is 51.5%/48.3% and the age distribution is under 5 years old [2].

Electric shocks cause burns, especially where electricity enters and exits the body, apart from arrhythmia, accompanying traumas and organ damage,. These electrical burns are the most common finding in physical examination [2].

Electrical burns in children are frequently seen under the age of 3 years and located perioral region [3]. In this period, children’s interest is about the environment. They try to recognize the object in their hands by putting it in the mouth and chewing it. This object may be a plug or cable connected to electricity. Perioral burns affect life aesthetically and functionally.

Conclusion

Approaching electric shocks requires an attitude that mobilizes the whole medicine. While performing irrigation and wound care for burns in the external examination, it is essential to perform a whole body examination in terms of accompanying trauma findings and to request vital signs, ECG and blood tests to detect organ damage.

References

1. Almiş, H., et al., Again, new, Afresh: Electric Injuries In Children. Sakarya Medical Journal, 2014. 4(4): p. 182-185.
2. Oğuz, S., et al., Factors influencing clinical outcomes in children admitted to the emergency department with electrical injuries. J Ped Emerg Intensive Care Med, 2015. 2(3): p. 121-126.
3. Keskin, M., et al., Perioral electrical burn in children: case report. Ulus Travma Acil Cerrahi Derg, 2008. 14(4): p. 326-329.

SÖZEL 27

EFFECTS OF CHITOSAN ACETATE BANDAGE ON WOUND HEALING ON EXPERIMENTALLY CREATED FULL COAT SKIN WOUNDS ON RATS

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Abstract

Wound is disintegrity of the tissue after trauma. Wound healing is a complex process which occurs in three stages. There are topical agents in usage to accelerate this continues process which is affected by inflamatory cells and secreted

mediators. There are studies about the effects of the haemostatic agents on wound healing, recently.

In our study, which is planned in our department and carried out in Trakya University Experimental Animal Studies Laboratory, we aimed to investigate the effects of Chitosan Acetate Bandage on wound healing which hasn't been study thruly before.

Four separate study groups each of which included eight rats were formed. In the first group wound care were performed with normal saline and biopsies were performed on the third day. In the second group wound care were performed with Chitosan Acetate Bandage and biopsies were performed on the third day. In the third group wound care were performed with normal saline and biopsies were performed on the seventh day. In the fourth group wound care were performed with Chitosan Acetate Bandage and biopsies were performed on the seventh day.

Biopsy materials were examined histologically by total inflamatuar cell score, intensity of polimorphonuclear leukocytes and mononuclear inflamatory cells, vascular proliferation, fibroblastic proliferation and fibrosis score.

On the 3rd day first two groups were evaluated regarding the total inflamatory cell score and the intensity of the polimorphonuclear leukocytes and no statistically significant difference was found. Likewise on the 7th day, the reminding two groups were evaluated regarding the mononuclear inflamatory cell intensity, vasculary and fibrotic proliferation and the fibrosis score and no statistically significant difference was found either.

Although the Chitosan Acetate we have used on the wounds was found to have no positive effects in the histopathological evuations, we believe that further studies combining the histopathological and biochemical evaluation methods are needed to determine better.

Key words: Chitosan Acetate, wound healing, trauma

SÖZEL 28

INVISIBLE SCAPHOID BONE FRACTURE 1,2

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Introduction: The most important of the eight bones in the wrist is the scaphoid bone. It is centrally located relative to these eight bones and is frequently subject to trauma. This bone is the most commonly injured carpal bone (70%) as a result of daily activities, sports-related injuries and falls on the wrist. On examination, there is severe pain on the thumb side of the wrist. Pain increases with wrist movements. It is a fracture that can be missed if not carefully examined. The fact that it is not seen at the rate of 10-20% in the first x-rays also plays a role in this. Diagnosis is made by CT and MR imaging, which will be taken on suspicion of a fracture. Usually, scaphoid fractures are difficult to heal. In the treatment process, plaster or surgical options are available.

Case: A 40-year-old male patient was brought to the emergency room with the complaint of falling down the stairs. He had fallen on his side from a height of about 2 meters. His vitals were stable, conscious, oriented, cooperative. On physical examination, there was tenderness and mild edema in the right wrist. Bidirectional graphy was requested for the patient's wrist and hand. There was a suspicious line in the distal radius on the lateral view on the X-ray, but there was no pathology in the AP image (Figure 1). Due to the patient's severe pain and edema in the wrist, scaphoid graphy and wrist computed tomography were performed. On imaging, there were fractures in the distal radius and scaphoid bone (Figure 2). The patient was consulted to orthopedics, and a follow-up was recommended by performing a scaphoid plaster.

Conclusion: We found that this patient, whose initial radiological imaging was normal, had fractures as a result of further workup. In this presentation, we aimed to emphasize the importance of detailed examination and clinical suspicion of patients admitted to the emergency department. Patients who apply to the emergency department should be examined in detail, and further investigations should not be avoided when necessary, taking into account possible preliminary diagnoses. In this way, the diagnosis of the patients will not be missed and the treatment will be started.

Key Words: Scaphoid Bone, Carpal Bone, Emergency Department

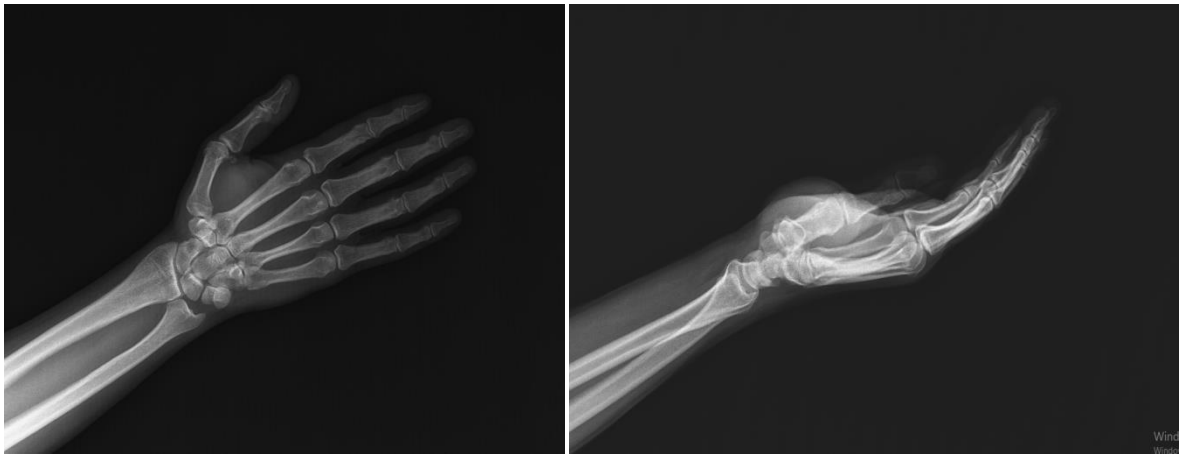

Figure 1: Two-way direct radiograph of the patient

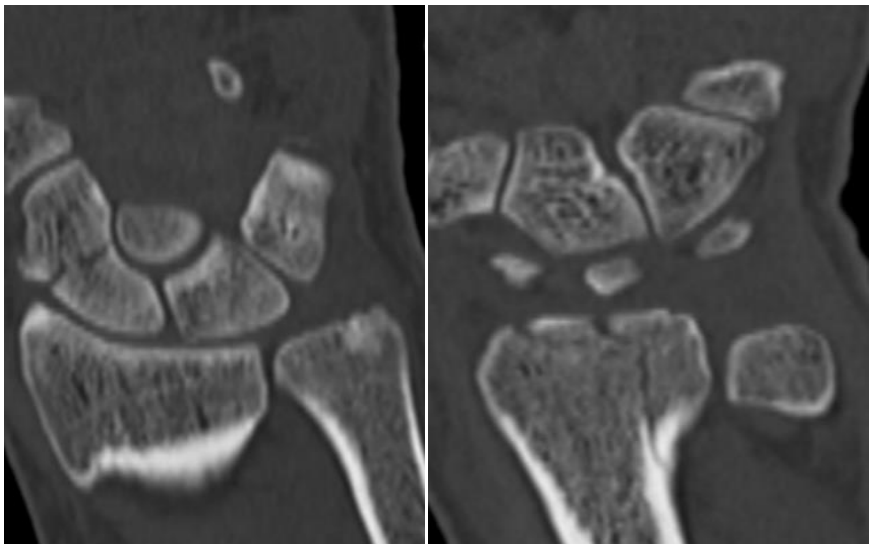

Figure 2: CT images of the patient (fracture in the scaphoid bone and distal radius)

SÖZEL 29

A Rare Cause of Abdominal Pain: Emphysematous Cystitis

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Keywords

Urinary infection, emphysetamous cystitis, diabetes mellitus

CASE PRESENTATION

Emphysematous cystitis (EC) is a rare urinary tract infection, more common in women with diabetes mellitus (DM). It is characterized by the accumulation of air in the bladder wall and lumen of patients. The clinical findings of the disease can vary from asymptomatic cases to septic shock findings. Urosepsis can be prevented by making the diagnosis quickly and starting treatment. Imaging methods are used in the definitive diagnosis (1,2,3).

In this article, we made a rapid evaluation and diagnosis of an EC case detected in the emergency department in a timely manner. We wanted to share a case who was discharged with recovery after hospitalization.

Case Report

A 76-year-old female patient was brought to the emergency department by 112 with complaints of fever, malaise and abdominal pain. The patient, who had been weak for 3 days, started to have fever and abdominal pain today. About additional diseases, she had hypertension, diabetes mellitus(DM) and chronic heart failure. General condition of the patient was moderate, she was conscious, cooperative and oriented. Vital signs were blood pressure: 92/48 mmHg, pulse: 108/min saturation-O2: 98%, body temperature: 38.7 C. On physical examination, there was tenderness in the suprapubic region.

In the laboratory tests of the patient, leukocytes: 12.400/mm3 (4,500-11,000/mm3), C-Reactive Protein: 19.2 mg/L (0-5 mg/L), glucose: 326 mg/dl (80-110 mg/dl), creatinine: 1.03 mg/dL (0.5-1.2 mg/dL). Urine microscopy revealed abundant leukocytes and erythrocytes. Contrast-enhanced abdominal computed tomography (CT) examination of the patient revealed intramural air in the bladder, consistent with EC. Infection consultation was requested and hospitalization was given to the patient. She was discharged after one week of follow-up.

Imaging

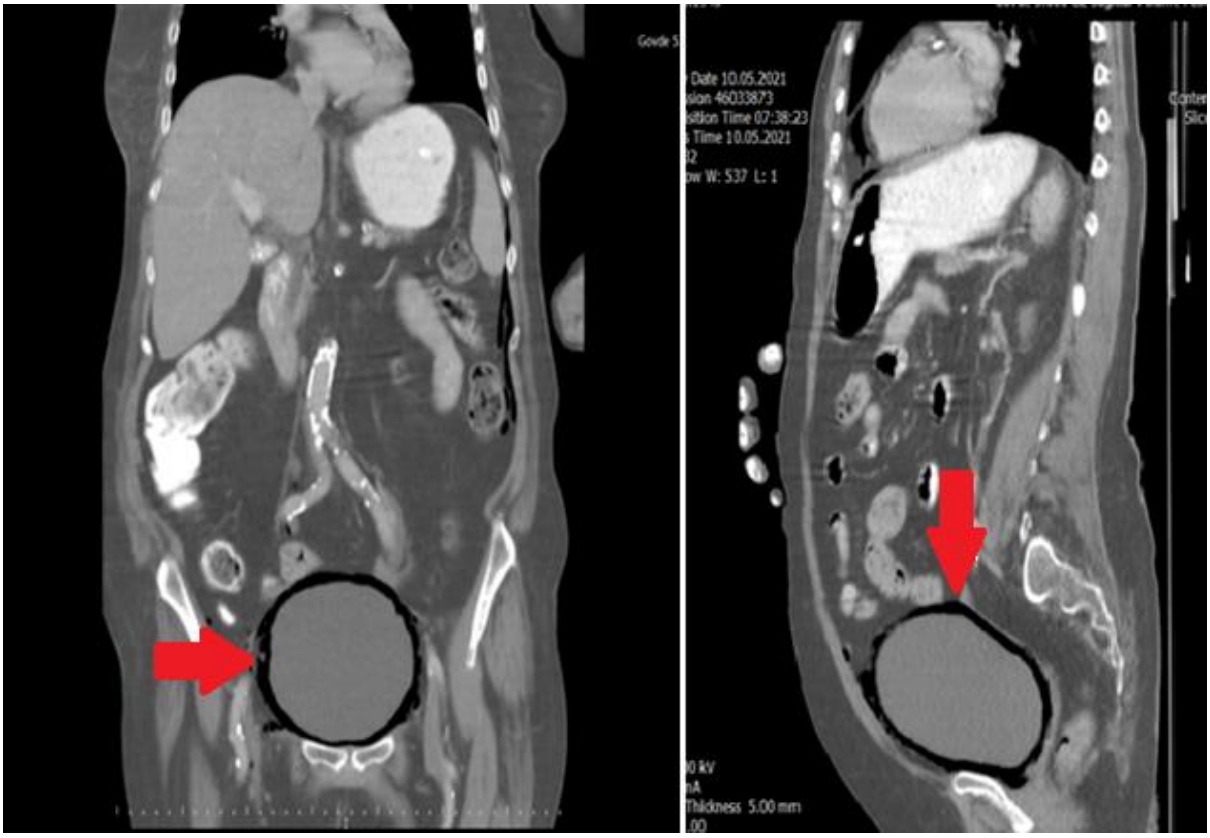

Figure 1: Intramural air in the bladder along the periphery of the wall

Conclusion

The clinical findings of EC can range from asymptomatic or mild urinary tract infections to septic shock. The most common finding in AS is abdominal tenderness. In urine analysis, leukocyturia and hematuria are usually observed together (2,4). Radiological imaging is valuable for diagnosis and the most reliable method is CT. In general, treatment is wide-spectrum antibiotics, bladder drainage, and glucose control. In most cases, treatment can be started with wide-spectrum antibiotics and the antibiotic can be changed according to the pathogen isolated in the urine culture (2,3,5).

In conclusion, emergency physicians should keep this in mind in the differential diagnosis of acute lower abdominal pain, especially in high-risk patients.

References

1. Thomas, A. A., Lane, B. R., Thomas, A. Z., Remer, E. M., Campbell, S. C., & Shoskes, D. A. (2007). Emphysematous cystitis: a review of 135 cases. BJU international, 100(1), 17-20.

2. Ergün, T., Olcay Eldem, H., & Lakadamyalı, H. (2014). Akut alt karın ağrısının nadir nedeni: Amfizematöz sistit. Turkish Journal of Urology, 40(1).

3. TAĞCI, S., ÖZDEN, C., GÖKKAYA, C. S., AKTAŞ, B. K., & BULUT, S. (2016). Emphysematous cystitis: a case report. Journal of Clinical and Analytical Medicine, 7(1), 138-140.

4. Toyota, N., Ogawa, D., Ishii, K., Hirata, K., Wada, J., Shikata, K., & Makino, H. (2011). Emphysematous cystitis in a patient with type 2 diabetes mellitus. Acta Medica Okayama, 65(2), 129-133.

5. Amano, M., & Shimizu, T. (2014). Emphysematous cystitis: a review of the literature. Internal medicine, 53(2), 79-82.

SÖZEL 30

Prognostic Value of Integrated Pulmonary Index (IPI) Value in Determining Pneumonia Severity in Patients Diagnosed with COVID-19 Pneumonia in the Emergency Department

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Summary

Objective: The aim of this study is to examine the predictive power of the Integrated Pulnonary Index (IPI) values measured at admission in patients diagnosed with COVID-19 pneumonia in the emergency department. In addition, the correlation between CURB-65 and PSI scores and IPI values in COVID-19 pneumonia was also investigated.

Method: The study was conducted prospectively between April 2020 and December 2020. IPI value was measured and PSI and CURB-65 scores were calculated during the application in patients diagnosed with COVID-19 pneumonia in the emergency department. The predictive power of the IPI value in patients with clinical severity and the correlations between clinical severity and PSI, CURB-65 and IPI scores were examined. All data obtained during the study were recorded in the study form and evaluated using the IBM SPSS 22.0 statistical program. P <0.05 was considered statistically significant.

Results: 81 patients were included in the study. When the pneumonia severity of the patients was compared with the CURB-65, PSI and IPI values, a statistically significant difference was found between the clinical severity groups for all scores (p<0.001 for each score). While the correlation between clinical severity and CURB-65 and PSI scores was the same direction and moderate (r:0.556 and r:0.613, respectively); The correlation between clinical severity and IPI value was found to be inverse and high (r:0.824). While the IPI value was green, the sensitivity to predict mild pneumonia was 94.92%, and the specificity was 54.55%. The positive likelihood ratio (PLR) and negative likelihood ratio (NLR) were 2.09 and 0.09, respectively. When the IPI value was red, its sensitivity was 97.78% and its specificity was 83.33% in detecting severe pneumonia. PLR and NLR are 5.87 and 0.03, respectively.

Conclusion: Although all scores show a significant correlation with clinical severity in patients with COVID-19 pneumonia, this correlation is moderate in PSI and CURB-65 scores, while there is a high inverse correlation between IPI value and clinical severity. Considering the ease of use of the IPI value and its correlation with the clinic, we believe that it is more successful than CURB-65 and PSI scores in predicting clinical severity in patients with COVID-19 pneumonia.

1. Introduction

Scales such as the pneumonia severity index (PSI) and CURB65 are used to determine the severity and management of the disease in patients presenting with pneumonia in the emergency departments; however, the predictive value of these scales in COVID-19 pneumonia is unknown. The Integregate Pulmonary Index (IPI) is a newly used measure to evaluate ventilation and oxygenation in patients, which

allows to quickly assess the patient's respiratory status [1]. The aim of this study is to examine the power of IPI values measured at admission to predict prognosis in patients diagnosed with COVID-19 pneumonia in the emergency department. In addition, the correlation between the aforementioned pneumonia scores and IPI values in COVID-19 pneumonia was also investigated.

2. Materials and Methods

This study was conducted prospectively, following local ethics committee approval, between April 2020 and December 2020 in the emergency department of a training and research hospital. Patients over the age of 18 who were diagnosed with COVID-19 pneumonia in the emergency department were included in the study. The diagnosis of COVID-19 pneumonia was made by the presence of PCR (polymerase chain reaction) positivity and characteristic thoracic tomography findings in addition to the existing pneumonia definition criteria. Patients whose information could not be accessed in the hospital registry system for any reason, who were under the age of 18, had a history of recent hospitalization (within the last 2 weeks), were pregnant, and refused to participate in the study were excluded from the study. Patients were grouped as mild, moderate, or severe according to local COVID-19 pneumonia management and treatment guidelines [2]. PSI and CURB-65 scores were calculated in all patients.

IPI measurement was carried out simultaneously with the initiation of examination and treatment, after detailed anamnesis and physical examination in patients who were thought to be pre-diagnosed with COVID-19 pneumonia. This measurement was measured with a Microstream Bedside Capnography Monitoring® device with a probe attached to the index finger of the left hand and a nasal cannula (Oridion Filter Line®) to be used for etCO2 measurement, by leaving the probe attached for two minutes, and the value at the end of the second minute was taken as the measurement value. The IPI value is a scoring category that is categorized as red, yellow, and green, and if the IPI value is 1-4 it is classified as red, 5-7 as yellow, and 8-10 as green [1]. As the IPI value decreases, the clinical severity of the patient increases and indicates the need for urgent intervention.

Statistical Analysis

Data analysis was performed using SPSS for Windows 22 package program (Chicago, Illinois, USA). After determining whether the data were normally distributed with the Kolmogorov-Smirnov test, all data were given as mean±standard

deviation or as the difference between the median value and quartiles (IQR 25%-75%). Categorical variables were evaluated with Chi-square and continuous variables were evaluated with Kruskal Wallis test or Mann Whitney U test. The relationship between the PSI, CURB-65 scores and IPI values of the patients was investigated with the Pearson or Spearman correlation test. IPI score and compliance with clinical severity were evaluated with the diagnostic sensitivity specificity calculator. The statistical significance level was accepted as $p<0.05$ for all calculations. In this study, the sample size was decided as 74 using the table recommended for the sample size calculation in Dr. Hajian-Tilaki diagnostic studies [3].

3. Results

A total of 81 patients diagnosed with COVID-19 pneumonia were included in the study, and the mean age of the patients was 62±15 years. The correlation of CURB-65, PSI and IPI values with the clinical severity group was also examined, and a statistically significant correlation was found for all scores ($p<0.001$). While the correlation between clinical severity and CURB-65 and PSI scores was the same and moderate (r:0.556 and r:0.613, respectively); The correlation between clinical severity and IPI value was found to be inverse and high (r:0.824). (Table 1).

The prognostic value of the color categories in terms of clinical severity was also calculated. While the IPI value was green, the sensitivity to predict mild pneumonia was 94.92%, and the specificity was 54.55%. The positive likelihood ratio (PLR) and negative likelihood ratio (NLR) were 2.09 and 0.09, respectively. When the IPI value was red, its sensitivity was 97.78% and its specificity was 83.33% in detecting severe pneumonia. PLR and NLR are 5.87 and 0.03 respectively (Table 2).

4. Conclusion

We have two main findings in our study in which we investigated the effectiveness of the IPI value measured at the time of admission in patients diagnosed with COVID-19 pneumonia in the emergency department in predicting the severity of pneumonia in the patient and the correlations of the IPI value with the PSI and CURB-65 scores. First and foremost, the IPI score has gradually decreasing values in patients with mild, moderate and severe pneumonia, and a statistically significant difference was found between these groups. This result means that by using the IPI score, it is possible to have an idea about the clinical severity of the patient in the early period. Thus, with the early detection of patients with mild pneumonia, unnecessary

investigations and long stays in the emergency room can be avoided. On the other hand, early detection of severe pneumonia patients, may improve patient management by allowing the physician to intervene earlier in these patients.

Our second result is that a highly significant, inverse correlation was found between the IPI value and the PSI and CURB-65 scores. The reason why the correlation was found to be inverse is due to the IPI score is defined as the worst prognosis given to the lowest score, not the highest score, unlike the other two scores. When the clinical severity of the cases included in the study and the correlation of IPI value, CURB-65 and PSI scores were examined; A moderately significant correlation was found between CURB-65 and PSI scores and pneumonia severity in the same direction, while a highly significant correlation was found between IPI score and pneumonia severity in the inverse direction. This suggests that in COVID-19 pneumonia, the IPI value is a better indicator in determining mild, moderate and severe pneumonia in patients compared to other scores.

When the prognostic value of IPI color is examined; When the IPI was green, the sensitivity to predict mild pneumonia was 94.92%, the specificity was 54.55%, and the PLR (positive likelyhood ratio) and NLR (negative likelyhood ratio) values were 2.09 and 0.09, respectively. This result suggests that the IPI value may be a good triage score for early detection and rapid discharge from the emergency room of COVID-19 patients with mild pneumonia. When IPI was red, it had a sensitivity of 97.78%, a specificity of 83.33%, and a PLR value of 5.87 and an NLR value of 0.03 in detecting severe pneumonia. IPI is an algorithm calculated based on instant vital findings, and initial vitals may change after initial treatment in the emergency room. Therefore, the PLR value was low as we predicted the outcome with a single IPI value measured at the beginning. The IPI value re-measured after emergency treatment may be more instructive in predicting the outcome.

Key Words: IPI, Pneumonia, PSI, CURB-65

Resources

1.Ronen M, Weissbrod R, Overdyk FJ, Ajizian S. Smart respiratory monitoring: clinical development and validation of the IPI™ (Integrated Pulmonary Index) algorithm. J Clin Monit Comput. 2017 Apr;31(2):435-442. doi: 10.1007/s10877-016-9851-7.

2.T.C. Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü. (2021). Müdürlüğü, COVID-19 (SARS-CoV-2 Enfeksiyonu) Erişkin Hasta Tedavisi, Accessed: Sep 6, 2021. [Online]. Available:https://covid19.saglik.gov.tr/Eklenti/40719/0/covid19rehberieriskinhastayonetimivetedavipdf.pdf

3.Hajian-Tilaki, K. (2014). Sample size estimation in diagnostic test studies of biomedical informatics. Journal of biomedical informatics, 48, 193-204

Tables

Table 1: Evaluation of the correlations of the scores used with each other and disease severity

	P value	R value
Correlation between scores and disease severity		
• Disease Severity– CURB-65	<0,001	0,556
• Disease Severity – PSI	<0,001	0,613
• Disease Severity– IPI	<0,001	-0,824

Table 2: Prognostric valıe of IPI color

	Predictive value for mild pneumonia when IPI is green	Predictive value for severe pneumonia when IPI is red
Sensitivitity (%) 95%CI	94,92% (85,85%- 98,94%)	97,78% (88,23%- 99,94%)
Specifity (%) 95%CI	54,55% (32,21%- 75,61%)	83,33% (67,19%- 93,63%)
PLR 95%CI	2,09 (1,32- 3,32)	5,87 (2,82- 12,2)
NLR 95%CI	0,09 (0,03- 0,29)	0,03 (0- 0,21)
Accurancy 95%CI	83,95% (74,12%- 91,17%)	91,36% (83%- 96,45%)

SÖZEL 31

Effect of Smoking on Lipid Profile

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Purpose: It is aimed to examine the effect of smoking, which is one of the most prominent health problems all over the world, on blood lipid values.

Method: The data of the patients who applied to Sakarya Kaynarca Şehit Gökhan Ayder District State Hospital Family Medicine Polyclinic between October 2020 and October 2021 were scanned retrospectively. There were 674 patients whose lipid profiles were checked, and 183 of these patients were excluded from the study because smoking data could not be obtained. 189 patients who were using drugs for any lipidopathy were also excluded from the study. 302 patients who did not meet the exclusion criteria were included in the study. Demographic data and lipid profile data of the patients were recorded. Statistical results were obtained by appropriate methods (Mann Whitney U).

Results: The mean age was 60.6 (33-88, ±10.59). While 43.4% (n=131) of our patients were female, 56.6% (n=171) were male. Among the patients included in the study, 201 people (66.6%) were non-smokers, and 101 people (33.3%) were smoking. LDL, HDL and triglyceride data of our patients were 123.59 (37-281, ±38.86), 45.55 (20-119, ±12.42) and 165.93 (48-564, ±91.24) respectively. No statistically significant difference was observed between smoking and LDL (p:0.651). No statistically significant difference was observed between smoking and triglycerides (p: 0.587). A strong inverse statistical difference was found between smoking and HDL cholesterol levels (p<0.001).

Conclusion: While smoking does not have a significant effect on LDL and triglyceride levels, it has a negative effect on HDL levels.

Keywords: Smoking, Lipid profile, HDL, LDL, Triglyceride

KONUŞMA ÖZETLERİ

KONUŞMA ÖZETİ 1

" Emergency Nursing. New field of activity for experience nurses"

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The modern nursing as a separate division of medicine and health sciences is a huge field of development. The advancement of knowledge, technology, as well as increased expectations of patients to medical care affects the need to seek new nursing care paths of the common The process of nursing education Poland is implemented in the Bologna System, which allows for higher education at two levels: Bachelor's degree in Nurse Science and Master of Nursing Science. This process takes place in accordance with the requirements of the WHO, which requires graduate training in conducting prevention activities, education, treatment, rehabilitation and care.

Emergency nursing one of many nursing specialization opens up a range of possibilities for staff development, but also requires that provided rescue skills were implemented at the highest possible level. Standardization issues such as education in the nursing profession of the process of post-graduate education, responsibilities and professional ethics obliged Medical professional act according to conventional care process.

The aim of the course specialization is to qualify nurses to fulfillment of professional duties of nursing in the emergency medical system. The new specialization program is valid from 24th Aug 2015. The duration of specialization may not be less than 18 months and longer than 24 months to start specialized course the

candidate must have a documented at least two years of professional experience in the last 5 years. The course lasts 812 hours, including minimum 322 practical. The course nurse acquire the skills required in everyday practice in emergency department or emergency medical team.

Theory and practice of the course to specialist based on issues such as:
- Emergency Medical Service in the The State Emergency Medical Services
- Life and health threating conditions
- The organization and the specifics of nurses work in units of the system of the National Medical Rescue
- Legal, ethical and socio-psychological aspects of emergency medicine

During the course of practical trainees apprenticeships among other things:
- Center for emergency notification
- Department of crisis management,
- Hospital emergency department,
- In the operating room
- Department of intensive coronary care
- ICU
- Trauma Center
- Maternity unit, gynecological obstetric emergency room
- Pediatric emergency room, children's operating theaters, pediatric intensive care

After completing the course, specialization in nursing rescue participant can perform 33 rescue activities:

- assessment of the patient to determine the procedure and the decision to conduct or withdrawal of medical rescue operations
- establishing and maintaining basic and advanced cardiopulmonary resuscitation in adults and children based on ILCOR guidelines.
- non instrumented restoring airway
- instrumented restoring airway using the equipment to the glottis airway and conic puncture.

-made endotracheal intubation in cardiac arrest
- respiratory suction
- the use of reactive oxygen therapy, breathing support via self-inflating bag
- the use of active oxygen using a face mask, self-inflating bag with one-way valve or using a respirator
-made automated defibrillation, manual defibrillation based on ECG defibrillator / monitor performance of ECG teletransmission

- conducting childbirth outside hospitals.
- conducting medical segregation in the prehospital and emergency department.
- preparation of the patient and medical care during transport.
- leading a team of emergency medical
- conducting training in cardiopulmonary resuscitation for different audiences
- self-administration of drugs without a doctor's order, ad hoc emergency drugs specified in the regulations of the Ministry of Health

- and other activities arising from the duties of nurses working in the emergency department or emergency medical team

Nursing role in Emergency Medical System is a very important part of patient care. Difficult working conditions; stress, emergency situations require nurses take positive action supported by accurate knowledge and experience. Emergency Departments in Poland are equipped with intensive care and post Traumatic Centers. Therefore, it is expected to emergency nurse has to competence in intensive care.

Keywords: nursing, emergency medicine, specialization

KONUŞMA ÖZETİ 2

EMERGENCY MANAGEMENT OF

HYPONATREMIA AND HYPERNATREMIA

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HYPONATREMIA:

Definition:

Clinical condition where plasma sodium concentration is below 135mEq/L. Hyponatremia is one of the most common electrolyte disturbances and is encountered in 10-15% of hospitalized patients.

Etiology:

Hyponatremias are divided into three main groups according to plasma osmolality:

1-Hyperosmolar Hyponatremia; Plasma Osmolality higher than 295mOsm/kg H2O

Hyperglycemic emergencies (each 100mg/dl increase in Plasma Glucose causes a 1.6mEq/L decrease in Na concentration), excessive mannitol intake, glycerol treatment.

2-Isoosmolar (Pseudo) Hyponatremia; Plasma Osmolality is between 275 and 295mOsm/kg H2O. It is seen in conditions such as hyperlipidemia, hyperproteinemia (MM, Waldenstrom Macroglobulinemia).

3.Hypoosmolar hyponatremia: Conditions with plasma osmolality below 275 mOsm/kg H2O. It is the most common type of hyponatremia in Emergency Departments. It is divided into three groups.

a-Hipovolemic hypoosmolar hyponatremia; It is seen in excessive diuretic use, mineralocorticoid deficiencies, vomiting, diarrhea, gastrointestinal losses, loss to third spaces (burn, peritonitis, pancreatitis), salt-losing nephropathies.

b-Hypervolemic hypoosmolar hyponatremia: Total body water and sodium are high. It is seen in conditions such as congestive heart failure, liver cirrhosis, nephrotic syndrome.

c-Euvolemic hypoosmolar hyponatremia; Total sodium level did not change, but body water increased. It is seen in conditions such as inappropriate ADH

syndrome, glucocorticoid deficiency, hypothyroidism, hypoxia or hypercapnia, primary polydipsia.

Clinical Features:

While evaluating the patient with hyponatremia; Plasma sodium concentration, osmolality, patient volume status, severity of symptoms, duration of onset of hyponatremia, and underlying causes should be evaluated.

According to the serum sodium concentration; Hyponatremia can be evaluated in three groups.

If the serum sodium concentration is between 130 and 134 mEq/L, it can be considered as mild hyponatremia, and if it is between 121 and 129 mEq/L, it can be considered as moderate hyponatremia.

During these periods, clinical symptoms such as headache, fatigue, nausea-vomiting, disorientation, memory problems, weakness, and cramps can be observed.

If the serum sodium concentration is below 120 mEq/L, it is considered as severe hyponatremia and symptoms such as vomiting, seizure, confusion, somnolence, hemiplegia, respiratory failure, and coma may be seen.

According to the development period of hyponatremia; Acute hyponatremia developing in less than 24 or 48 hours is considered as acute hyponatremia, and hyponatremia developing in more than 48 hours is considered as chronic hyponatremia.

Severe symptoms such as coma and convulsions may occur even if the sodium level is above 120mEq/L in cases of acute hyponatremia in which the sodium amount decreases in less than 48 hours.

Treatment:

In the emergency, airway, respiration and circulation should be stabilized first. Patients should be evaluated in terms of 3% hypertonic NaCl bolus dose indication.

To prevent brainstem herniation when sodium level falls below 120mEq/L in patients with severe symptoms such as coma and convulsions, chronic hyponatremia patients with traumatic brain injury, intracranial tumor and recent neurosurgery, Psychological polydipsia, marathon runners, high dose ecstasy intake 3% hypertonic saline should be given with a 10-minute infusion of 150mL after. It can be repeated every 15-20 minutes until a response is received.

Bolus hypertonic saline therapy should be discontinued when a 4-6mEq/L increase in serum sodium is achieved or severe symptoms disappear.,

Patients with asymptomatic chronic hyponatremia whose serum sodium level is below 120mEq/L should be directed to follow-up by increasing salt intake in their diet.

Emergency treatment is indicated in patients with chronic hyponatremia with a serum sodium level below 120 mEq/L or with a serum sodium level above 120 mEq/L and accompanied by neurological symptoms.

When the serum sodium level reaches 125mEq/L, IV therapy is gradually reduced. Serum electrolyte levels should be monitored every 4-6 hours.

In edematous and hypervolemic patients such as heart failure and cirrhosis, 20 mg Furosemide is initially treated with 15-30 mL/hour 3% hypertonic saline treatment.

Hypovolemic patients who lose fluids and electrolytes from the urinary and gastrointestinal tract are treated with 0.9% saline solution.

Complications in the Treatment of Hyponatremia:

While correcting the serum sodium level, care should be taken against osmotic demyelination syndrome, which is the most dangerous complication.

Osmotic demyelination syndrome; It results from brain cell destruction as a result of rapid correction of hyponatremia and the rapid outflow of free intracellular water from the cell. It gives findings such as dysarthria, dysphagia, lethargy, paraparesis, convulsions and coma.

Patients with initial serum sodium level below 120mEq/L, alcoholism, cirrhosis, congestive heart failure, malnutrition, hypokalemia, use of tolvaptan pose a high risk for osmotic demyelination. If there is no high risk for osmotic demyelination, the target sodium increase should be 8-12mEq/L/day .

HYPERNATREMIA:

Definition:

Hypernatremia; plasma sodium concentration above 145mEq/L. It is less common than hyponatremia, its mortality is higher (40%-60%) The main protection mechanism is the feeling of thirst. Sodium concentration above 185mEq/L is fatal.

Hypernatremia can be evaluated in three groups:

a-Hypovolemic Hypernatremia: It is the most common hypernatremia group. It is seen in conditions such as acute renal failure, diuretics, lactulose, burns, sweating, gastrointestinal losses.

b-Euvolemic Hypernatremia: It is an increase in sodium concentration without loss of fluid. It can be seen in conditions such as central diabetes insipidus, nephrogenic diabetes insipidus, use of lithium, demeclocycline, excessive salt intake (suicidal), hypercalcemia, hypokalemia.

c-Hypervolemic Hypernatremia: It is an increase in water and sodium with more sodium. It is seen in conditions such as iatrogenic (hypertonic fluids and sodium bicarbonate therapy) Cushing's disease, primary aldosteronism, drowning in seawater.

Clinical Features:

Hypernatremia that develops in less than 48 hours is called acute hypernatremia, and hypernatremia that develops in more than 48 hours or whose onset is unknown is called chronic hypernatremia.

Patients at risk for the development of hypernatremia: elderly, newborns, those with mental illness, diabetes mellitus and patients with underlying polyuric disorders (central or nephrogenic Diabetes Insipidus).

Symptoms such as changes in consciousness, muscle weakness, hyperactivity in reflexes, convulsions, fever, nausea, vomiting, severe thirst, and difficulty in breathing can be seen.

Treatment:

Airway, breathing and circulation should be controlled in the emergency department. The volume status should be evaluated, taking into account the acute and chronic conditions of the clinic. Fluid replacement should be performed in the patient with signs of hypovolemic shock. (0.9% Saline, Ringer's lactate, or balanced solutions 20ml/kg/hour) Volume status should be followed hourly with CVP measurement or bedside ultrasonography with VCI index.

After filling the patient's intravascular volume, the free water deficit should be calculated with the sodium value obtained, and the fluid deficit should be closed in 24-48 hours with 5% dextrose (D5W) solution

Free water deficit is calculated as 0.6 x Weight x (measured sodium/140-1) and represents free water lost without electrolyte. The ideal initial therapy is 1.35mL/kg/hr D5W. Acute hypernatremia can be increased up to 3-6 ml/Kg/h.

The target in hypernatremias that last longer than 48 hours; serum sodium, glucose and other electrolyte values should be checked every 4-6 hours. Hemodialysis should be considered in life-threatening situations where there is no response despite effective fluid replacement therapy.

In patients with suspected diabetes insipidus, internal medicine consultation should be requested as the diagnosis process will take a long time for the emergency department. In central DI, desmopressin 0.05mg PO is used twice a day. In nephrogenic DI, a protein and sodium-restricted diet and diuretics such as thiazide, indomethacin and amiloride that increase urine concentration can be used.

KONUŞMA ÖZETİ 3

HEMODIALYSIS-DIALYSIS METHODS AND COMMON PROBLEMS

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Acule kidney replacement therapy (KRT) is commonly indicated for patients with acute kidney injury (AKI) Acute KRT include; Peritoneal dialysis, intermittent hemodialysis and variations of intermittent hemodialysis such as;hemofiltration, slow equilibrium dialysis [SLED]), continuous renal replacement therapy (CRRT).

Early initiation of KRT (ie, initiation before the patient develops an indication) (Grade 1B), since early initiation results in increased health care utilization but does not improve,and may worsen, outcomes in patients with severe AKI. On the other hand, excessive delay in initiation of KRT does not provide greater benefits and may be associated with an increased risk of adverse outcomes.

Dialysis in acute kidney injury in adults urgent indications; Refractory fluid over load, severe hyperkalemia (plasma potassium concentration >6.5 mEq/L) or rapidly rising potassium levels, signs of uremia; such as pericarditis, encephalopathy, or an otherwise unexplained decline in mental status, severe metabolic acidosis (pH <7.1), certain alcohol and drug intoxications Acute dialysis options are made according to clinical status, physical facilities, suitability for anticoagulation use access, to vascular access, catabolic stiuations and treatment plan (Transfusion, TPN).

The components of the acute dialysis prescription include the choice of hemodialysis membrane, dialysis session length, dialysate composition and temperature, blood flow rate, amount and rate of ultrafiltration (UF), choice of anticoagulation, and dialysis dose.

Common complications during hemodialysis: Acute complications commonly occur during routine hemodialysis treatments. They include the following: Hypotension – 25 to 55 percent of treatments, cramps – 5 to 20 percent, nausea and vomiting – 5 to 15 percent, headache – 5 percent, chest pain – 2 to 5 percent, back pain – 2 to 5 percent, itching – 5 percent, fever and chills – <1 percent.

Complications of vascular access account for more inpatient hospital days than any other complication of hemodialysis. The most common complications of hemodialysis vascular access are failure to provide adequate flow (300 mL/min) and infection. If referred to the ED for inadequate access flow that impairs dialysis, missing a single session should not result in uremic encephalopathy, allowing emergency dialysis for those with hyperkalemia and fluid overload in the ED

KONUŞMA ÖZETİ 4

POST-CPR HASTANIN YÖNETİMİ

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Cardiopulmonary resuscitation (CPR) is the most important intervention in the profession for a physician, especially if it is successful. Studies on this subject are an effort to seek perfection with small touches for a long time. As it is known, the importance given to cardiac compression is increasing day by day. Because

perfusion of the myocardium and brain has vital importance. This is the main reason why the term cardiopulmonary resuscitation has become cardiocerebral resuscitation in recent years.

Post-resuscitation Syndrome (PRS) is the clinical and pathophysiological processes of brain, myocardium and end organ damage occur as a result of impaired perfusion. The most common cause of arrest in adults is ventricular fibrillation/tachycardia (VF/VT), and in children, asphyxia and respiratory failure, and these did not differ in terms of causing PRS.

In the pathology of PRS, CPR after arrest causes cerebral hyperemia and impaired cerebral perfusion. These lead to impaired autoregulation and finally to cerebral edema and lead to post-resuscitative brain damage.

There is no laboratory or imaging method that can measure the presence and depth of post-resuscitative brain damage, but 72 hours after the CPR, the response of the patient for pain stimulus can give us information

Except for reversible causes that will be evaluated and corrected during CPR, the first test to be requested in a post-CPR patient is a 12-lead ECG. Especially in adult patients, the most common cause of arrest, is VF/VT which caused by acute myocardial infarction (AMI) mostly and the ECG taken in post-CPR patients guides us in planning coronary angiography (CAG). CAG is indicated immediately in the case of ST-elevation MI that will be detected on the ECG, and at the first opportunity in the case of non-ST-elevation MI.

The hemodynamic parameters required for the continuation of perfusion after the return of spontaneous circulation are systolic blood pressure of 90 mmHg and mean arterial pressure of 65 mmHg. These parameters should be provided with vasopressors such as epinephrine, norepinephrine, dopamine within the indication.

In a hemodynamically stable patient with spontaneous circulation, an O2 saturation over 94% and normocarbia (PaCO2) should be achieved with simultaneous lung protective ventilation. Sedo-analgesia should also be provided with agents such as fentanyl, midozolam, vecuronium in order to ensure the patient's comfort and compliance with mechanical ventilation.

Hyperglycemia, which is seen as the body's stress response, is itself a cause of mortality in post-CPR patients, is another parameter to be followed. It is recommended to keep blood glucose levels below 180 mg/dL without causing hypoglycemia.

Another parameter to be avoided in post-CPR patients is hyperthermia. In fact, guidelines recommend putting patients into induced hypothermia within their indications. This application, which will start in the hospital and last for at least 24

hours to reach the target body temperature of 32-36 oC, is indicated for the following patients:

Patients in whom the time elapsed since return of spontaneous circulation is less than 60 minutes, comatose (GCS < 9), intubated, unresponsive to pain stimulus, mean arterial pressure (MAP) greater than 80 mmHg, and body temperature > 34 °C.

Contraindications are patients with an order of “Do Not Resuscitate”, trauma, sepsis, advanced dementia, active bleeding, cancers with brain metastases There is not enough data on pregnant and pediatric age groups.

Mortality increases by 20% for each hour delayed in lowering body temperature to the target value. For this reason, external methods such as cold covers, ice packs and even direct ice applications, and internal methods as cold water from foley and nasogastric tube, and 30-40 mL/kg intravenous application of serum physiological at 4 oC are used in order to reach the target body temperature in 4-6 hours,

32 oC fever slows down the metabolism by 35-50% and hypothermia develops bradycardia, arrhythmia, coagulopathy, thrombocytopenia, hyperglycemia, hypokalemia, hypophosphatemia, hypomagnesemia, but hypothermia does not affect blood pressure.

When the fever falls below 36.5 oC, vasoconstriction occurs and shivering begin below 35.5 oC. Shivering is an undesirable complication for us as it speeds up the metabolism and increases the need for O2. Methods for prevent shivering such as drying the skin and warming the hands and feet, drugs which lower the shivering threshold such as paracetamol, acetylsalicylic acid, non-steroidal anti-inflammatory drugs, and paralysants, sedatives, and opiates that reduce tremor response can be used.

The rewarming process starts after at least 24 hours and the body temperature is raised to 1°C in 4 hours. During this period, the patient should be followed closely in terms of hypotension, hyperkalemia, and hypoglycemia.

Electroencephalography is one of the tests that should be performed in Post-CPR patients. Because seizures occur in 12-22% of this patients because of impaired cerebral autoregulation and it is difficult to diagnose these seizures in sedated patients.

It should be noted that perfusion is impaired not only for the heart and brain, but for all systems, and the damage also affects other organs. Complete blood count, coagulation tests, and other biochemical parameters should also be followed for the diagnosis and follow-up of end-organ damage, Foley tube should be used for monitoring urine output, nasogastric tube for gastric decompression and feeding.

Low molecular weight heparin for venous thrombosis prophylaxis and proton pump inhibitor for ulcer prophylaxis should be considered for treatment.

It should be kept in mind that the most common complications in intensive care follow-up are lung injury and acute respiratory distress syndrome due to mechanical ventilation, and urinary tract infections and pneumonias are the most common nosocomial infections.

References:

1. Panchal AR, Berg KM, Hirsch KG, et al. 2019 American Heart Association Focused Update on Advanced Cardiovascular Life Support: Use of Advanced Airways, Vasopressors, and Extracorporeal Cardiopulmonary Resuscitation During Cardiac Arrest: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. Circulation. 2019;140(24):e881-e894. doi:10.1161/CIR.0000000000000732
2. Callaway CW, Donnino MW, Fink EL, et al. Part 8: Post-Cardiac Arrest Care: 2015 American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care [published correction appears in Circulation. 2017 Sep 5;136(10):e197]. Circulation. 2015;132(18 Suppl 2):S465-S482. doi:10.1161/CIR.0000000000000262
3. Peberdy MA, Callaway CW, Neumar RW, et al. Part 9: post-cardiac arrest care: 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care [published correction appears in Circulation. 2011 Feb 15;123(6):e237] [published correction appears in Circulation. 2011 Oct 11;124(15):e403]. Circulation. 2010;122(18 Suppl 3):S768-S786. doi:10.1161/CIRCULATIONAHA.110.971002
4. Kang Y. Management of post-cardiac arrest syndrome. Acute Crit Care. 2019;34(3):173-178. doi:10.4266/acc.2019.00654
5. Pothiawala S. Post-resuscitation care. Singapore Med J. 2017;58(7):404-407. doi:10.11622/smedj.2017060
6. Nolan, J.P., Sandroni, C., Böttiger, B.W. et al. European Resuscitation Council and European Society of Intensive Care Medicine guidelines 2021: post-resuscitation care. Intensive Care Med 47, 369–421 (2021). https://doi.org/10.1007/s00134-021-06368-4
7. Madder RD, Reynolds JC. Multidisciplinary Management of the Post-Cardiac Arrest Patient. Cardiol Clin. 2018;36(1):85-101. doi:10.1016/j.ccl.2017.08.005
8. Polderman KH. Induced hypothermia and fever control for prevention and treatment of neurological injuries. Lancet. 2008;371(9628):1955-1969. doi:10.1016/S0140-6736(08)60837-5
9. Polderman KH, Herold I. Therapeutic hypothermia and controlled normothermia in the intensive care unit: practical considerations, side effects, and cooling methods. Crit Care Med. 2009;37(3):1101-1120. doi:10.1097/CCM.0b013e3181962ad5

10. Hunziker S, Johansson AC, Tschan F, et al. Teamwork and leadership in cardiopulmonary resuscitation. J Am Coll Cardiol. 2011;57(24):2381-2388. doi:10.1016/j.jacc.2011.03.017
11. Girotra S, Chan PS, Bradley SM. Post-resuscitation care following out-of-hospital and in-hospital cardiac arrest. Heart. 2015;101(24):1943-1949. doi:10.1136/heartjnl-2015-307450
12. Walker AC, Johnson NJ. Critical Care of the Post-Cardiac Arrest Patient. Cardiol Clin. 2018;36(3):419-428. doi:10.1016/j.ccl.2018.03.009
13. Kalra R, Arora G, Patel N, et al. Targeted Temperature Management After Cardiac Arrest: Systematic Review and Meta-analyses. Anesth Analg. 2018;126(3):867-875. doi:10.1213/ANE.0000000000002646
14. Kirkegaard H, Taccone FS, Skrifvars M, Søreide E. Postresuscitation Care after Out-of-hospital Cardiac Arrest: Clinical Update and Focus on Targeted Temperature Management. Anesthesiology. 2019;131(1):186-208. doi:10.1097/ALN.0000000000002700
15. Holden M, Makic MB. Clinically induced hypothermia: why chill your patient?. AACN Adv Crit Care. 2006;17(2):125-132.
16. Feigin VL, Anderson CS, Rodgers A, Anderson NE, Gunn AJ. The emerging role of induced hypothermia in the management of acute stroke. J Clin Neurosci. 2002;9(5):502-507. doi:10.1054/jocn.2001.1072

KONUŞMA ÖZETİ 5

Emergency Management of Hyperkalemia and Hypokalemia

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INTRODUCTION

Potassium (K) is the most important cation of the intracellular environment. Approximately 3500-total body potassium of 4000 mmol 98% of it is found inside the cell. Only 2% of the total especially in the extracellular area stimulant effect of potassium on nerves and muscles making it one of the most vital electrolytes.

The resting membrane potential in these structures is extracellular-with intracellular K concentration difference closely related. Intracellular and extracellular environments of potassium displacement occurs with between cell membrane sodium-potassium (Na-K) ATPase pump and K channels. Insulin, β2-drenergic

agonists, alkalosis, aldosterone and plasma K level itself into the cell; beta-blockers, beta-adrenergic agonists, acidosis, exercise, and hypertonicity stimulates it to slip out of the cell.

External K balance, ingested and excreted potassium refers to the balance between the quantities. Normally 90-95% of dietary potassium is in the kidneys and All, 5-10% through the intestines excreted from the body.

Potassium metabolism disorders presenting as low or high serum potassium levels are common especially in hospitalized patients. Hypokalemia and hyperkalemia are the results of disturbances in potassium intake, potassium secretion and transcellular shifts.

HYPOPOTASEMIA (HYPOKALEMIA)

Hypokalemia (hypokalaemia), is defined as plasma K level decrease below 3.5 mmol/L (mEq/L). Hypokalemia is probably the most common electrolyte disorder.

In the patient with low serum K concentration first should be investigated whether there is false hypokalemia. In cases of false hypokalemia and excessive leukocytosis, if the blood taken from the patient is left at room temperature for more than 1 hour, K passes into the leukocytes in excess. Since the passage of potassium into the cell occurs after the blood is taken from the patient, this is called pseudo-hypokalemia. If false hypokalemia is suspected, plasma blood cells should be obtained and separated quickly. If the blood is to be kept for a long time it should be stored refrigerated.

Etiology

Metabolic alkalosis can cause leading to hypokalemia both renal K loss and intracellular K shift. Exogenous insulin administration is the most common cause of iatrogenic hypokalemia. Fatal hypokalemia may develop, especially during the treatment of diabetic ketoacidosis with insulin. Anabolic states can lead to hypokalemia as a result of K shift into the cell. Other reasons barium intoxication, hypokalemic and thyrotoxic periodic paralysis. Hypokalemic periodic paralysis may be familial or sporadic. It is characterized by transient muscle weakness and limp

paralysis. Oral or intravenous (IV) potassium chloride (KCl) is used during attacks. K losses from the kidneys and extrarenal pathways are the most common causes of hypokalemia. Severe vomiting and nasogastric aspiration can lead to hypokalemia. Excessive sweating that will cause hypovolemia may increase K loss from skin and kidney.

Symptoms

Symptoms of potassium deficiency are highly variable and mainly depend on the degree of hypokalemia and the rate of development. Hypokalemia is rarely symptomatic unless the plasma K level falls below 3 mmol/L. Fatigue, myalgia and muscle weakness are the most common complaints. More severe hypokalemia can lead to progressive weakness, hypoventilation and may eventually lead to complete paralysis. One of the most serious consequences of hypokalemia increased risk of arrhythmias. Electrocardiographic (ECG) changes in hypokalemia do not correlate well with plasma K level. Early changes are flattening and negativity in the T wave. Then the U wave appears, ST segment depressed and the QT interval is prolonged. These changes are most pronounced when plasma potassium falls below 2.7 mmol/L. In severe K deficiency, the PR interval prolongs, the voltage decreases, the QRS complex widens, and ventricular arrhythmias develop.

Management

In patients with hypokalemia detailed information and a history should be taken. In anamnesis and physical examination drug use, dietary characteristics and electrolytes clinical manifestations that may be due to imbalances attention should be paid. Blood pressure measurement, edema and investigation of neuromuscular dysfunction is important. In the first step as a laboratory examination things to do; measurement of electrolyte levels, assessment of acid-base balance and complete is the blood count.

Treatment

Goals of treatment in hypokalemia:

1. To prevent the development of life-threatening complications such as severe arrhythmia and respiratory failure,

2. To replace the potassium deficiency,

3. To minimize losses,

4. In the form of treating the underlying cause can be summarized.

Severe cardiac arrhythmia, severe muscle weakness and respiratory failure, liver cirrhosis and plasma K level is below 2.5 mmol/L It is urgent requires treatment. Intravenous replacement should be preferred in emergency treatment. It is often used in isotonic sodium chloride (NaCl) in intravenous therapy. potassium chloride (KCl) infusion is preferred, but especially when accompanied by metabolic acidosis Potassium bicarbonate (KHCO3) can also be used in cases. Potassium application concentration not exceeding 60 mmol/L, application rate not exceeding 20 mmol/hour and total dose not exceeding 200 mmol/day recommended. High concentrations must be administered through a central vein. Plasma potassium should be monitored frequently during therapy and the subsequent infusion rate adjusted accordingly. Continuous ECG monitoring can be performed during high-dose applications. The most important side effect of treatment is hyperkalemia.

HYPERPOTASEMIA (HYPERKALEMIA)

Hyperkalemia (hyperkalemia), plasma K level It is above 5.0 mmol/L.

Etiology

Pseudohyperpotassemia means is an artificial rise in plasma potassium due to extracellular K movement just before or during blood sample collection. Clenching, hemolysis, pronounced factors are among contributing to leukocytosis or thrombocytosis.

Metabolic acidosis, insulin deficiency, hypertonicity, drugs such as beta-blockers, digoxin and succinylcholine, hyperkalemic periodic paralysis and excessive exercise may cause lead to hyperkalemia as a result of extracellular K shift. In excessive doses iatrogenic as a result of parenteral K replacement or in patients with renal failure may cause hyperkalemia. Hyperkalemia is more prominent

in acute kidney injuries characterized by cell destruction such as rhabdomyolysis, hemolysis, tumor lysis syndrome.

Symptoms

It depends on the degree of hyperkalemia and the rate of development. Although symptoms often occur at concentrations above 6.5 mmol/L, there may not always be a good correlation between plasma potassium and clinical manifestations. The most serious side effect of hyperkalemia is cardiac toxicity. The earliest ECG change is a tapering of the T wave. As hyperkalemia worsens, this is followed by a prolongation of the PR interval and a decrease in the QRS complex enlargement, atrioventricular conduction delay, and loss of P waves. Progressive widening of the QRS complex and merging with the T wave result in a sinus wave. Terminal event usually ventricular fibrillation and asystole.

Management

When hyperkalemia is detected, first pseudohyperkalemia possibility must be ruled out. In case of real hyperkalemia, immediate electrocardiography should be investigated and hyperkalemia should be cardiac involvement should be demonstrated. Renal dysfunction is the most common cause of hyperkalemia. Patients should have their blood urea and creatinine levels measured, as well as electrolytes, calcium, and glucose. The acid-base balance should be evaluated.

Treatment

The presence and severity of symptoms and signs of hyperkalemia, plasma K level, and development time of hyperkalemia should be considered in the treatment approach.

ECG changes and the presence of neuromuscular abnormalities, plasma K level higher than 6.5 mmol/L and acute hyperkalemia requires urgent treatment.

There are three main strategies in emergency treatment:

1. To provide membrane stabilization and cardiac to antagonize the effects,

2. To introduce potassium into the cell,

3. To provide K excretion from the body.

Intravenous administration of calcium gluconate, hyperkalemia by reducing membrane depolarization antagonizes its cardiac effects. 10-20 mL of 10% solution over five minutes administered as a slow bolus. During application ECG monitoring should be done. Effect in 1-3 minutes starts and lasts for 30-60 minutes. improvement in EKG If not observed, the dose can be repeated after 5-10 minutes.

The shift of potassium into the cell dextrose and insulin to provide sodium bicarbonate or β2-agonists are used. Dextrose and insulin are the most effective and safe agents that allow potassium to slide into the cell. 8-16 units crystallized in 500 mL 5-10% dextrose 1-2 hour infusion of insulin plasma potassium provides a decrease of approximately 0.5-1 mmol/L at the level of Its effect starts in 30 minutes and lasts for 4-6 hours. Although beta-adrenergic agonists are highly effective, their use is controversial and their side effects are common. The most common use of salbutamol administered by nebulization.

KONUŞMA ÖZETİ 6

Acute Problems and Management in Organ Transplant Patients

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Introduction

A successful kidney transplant was performed in 1954. Since then, the number of transplants has gradually increased. Doctors are more likely to encounter these patients each year. With the most common being kidney transplants liver, heart, AC, pancreas, and intestinal transplants are performed in descending order. Transplant patients often require lifelong immunosuppression.

Acute problems

- Infection (39%)
- Non-infectious GI/GU pathology (15%)
- Dehydration (15%)
- Electrolyte disturbances (10%)
- Cardiopulmonary pathology (10%)
- Injury (8%)
- Rejection (6%)
- GVH (Graft versus host) disease can occur, especially in bone marrow transplants.

Medical history and physical examination are very important.

Application problems

- Infection
- Rejection
- GVH disease
- Immunosuppressive drug complications
- Specific complications

  Liver

  - GI bleeding
  - Biliary complications

  Kidney

  - Urethral obstruction
  - Urine leakage
  - Lymphocele
  - Glomerulonephritis
  - Recurrent pyelonephritis/VUR
  - Allograft nephropathy

  Lung

  - Obstructive bronchiolitis
  - Bronchial stenosis, tracheobronchomalacia, hyperplastic granulation tissue and bronchial necrosis
  - HPV (Bronchial papillomatosis)

- PTE, PTX
- Phrenic nerve dysfunction

Heart

- CHF
- Ischemia
- Arrhythmias
- Stroke, intracranial bleeding
- PTE, PTX
- Interstitial fibrosis
- Complications specific to ventricular assist devices
- Cardiac allographic vasculopathy

• Post-operative complications

- Bleeding
- Vascular complications
- Wound complications

• Other problems

- Bone diseases
- Neurological diseases
- Cardiovascular diseases
- Malignancy

Examinations

- Complete blood count
- LFT, KFT, electrolytes, amylase, lipase
- Coagulation tests
- Cardiac enzymes
- ECG
- CRP
- Procalcitonin
- Lactate
- SAA
- IL-6
- Creatine kinase
- Urine test
- Levels of immunosuppressive drugs
- Serology (CMV, EBV, hepatitis, toxo, cryptococcus)
- Culture (mouth, sputum, urine, blood, stool, vascular access, wound site)
- CSF culture and antigen tests

- Radiological examinations
- ECO
- Bronchoscopy
- Cholangiography
- ERCP
- Hepatobiliary scintigraphy
- Lung function tests
- Biopsy

Approach

- Multidisciplinary
    - Emergency service doctor
    - Organ transplant team
    - Radiology
    - Infectious diseases
    - …..
- The transplant team should be consulted in terms of drugs (Side effects, interactions are important)
    - Aspirin and NSAI should be avoided.
- It is important to establish coordination with the organ transplant center.

KONUŞMA ÖZETİ 7

ACUTE KIDNEY INJURY AND MANAGEMENT

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Acute Kidney Injury (AKI) is a situation that develops as a result of a sudden decrease in kidney functions and glomerular filtration rate (GFR) within hours-days. Clinically;

– accumulation of nitrogen metabolities

– fluid and electrolyte deficits

– non-renal organ dysfunctions

involves a disruption of the immune system.

Its incidence in the community is 1%. Volume depletion, drugs, infection and obstruction make up 55-79%. 1/3 cases are diagnosed in the emergency department. It develops in 5-7% of hospitalized patients and in 15-40% of intensive care units. Mortality is around 7-20% in hospitalizations. While 10-20% dependence on dialysis develops, it also develops in 21% of transplant patients within 6 months.

Definition according to Kidney Disease: Improving Global Outcomes (KDIGO) Classification:

Increase in SCr ≥ 0.3 mg/dL in 48 hours

or

x 1.5 by baseline in 7 days

or

less than 0,5 ml /kg/h urine output in 6 hours

Reduction in global or regional blood flow is the common end cause. Recovery primarily depends on the improvement in renal blood flow. Clinically:

- Prerenal →(%40-80) decreased blood flow. It develops secondary to conditions that impair renal perfusion. There is no tissue damage at the beginning, it is a functional disorder.Prolongation of hypoperfusion = ischemic tissue damage = intrinsic acute kidney injury (ischemic acute tubular necrosis-damage)

Vomiting, diarrhea, burns, loss to the third space, pancreatitis, ileus, rhabdomyolysis, inadequate intake, dementia, changes in consciousness, cardiorenal, hepatorenal syndrome, sepsis, pericardial tamponade, drugs are the most common factors.

- Renal → (25-40%) parenchymal damage. Any region of the kidney parenchyma (glomeruli, tubule, interstitium and vascular structures). Prolonged ischemia may develop due to any prolonged prerenal condition, toxic causes. The most common cause is ischemic injury/ischemic tubular necrosis.

- Postrenal → (5-10%) urinary tract obstruction.

It is caused by conditions that prevent the flow of urine along the entire urinary tract from the renal pelvis to the urethral meatus. The main causes are ureteropelvic junction stenosis, stone, tumor, clot, papillary necrosis, malignancy, external pressure (tumor, retroperitoneal fibrosis), prostate pathologies, neurogenic bladder, urethral stenosis, posterior urethral valve.

Risk factors

Aging,Chronic kidney disease,D.Mellitus,Congestive Heart Failure,Multiple Myeloma,Dehydration,Sepsis,Major surgery,Hyperuricemia,Chronic liver disease

Clinical findings

There is no specific finding, it is generally indistinct. When uremia develops, nausea, vomiting, fatigue, dizziness, coma may be seen.

Pre-renal: volume depletion, decreased urine output, excessive vomiting, diarrhea, bleeding, fever, sweating

• Escape to the 3rd spaces after endothelial leakage: sepsis, pancreatitis, burns, hepatic orphan.

• Overdiuresis, decreased fluid intake Nephrolithiasis, papillary necrosis, flank pain and hematuria

• Fever, fatigue, weakness, darkening of the urine color: acute glomerulonephritis (tonsillo-pharyngitis, post cutaneous inf.)

• Acute renal artery occlusion: pain

• Acute interstitial nephritis: fever, arthralgia, rash

• Advanced age and anuria: congestion

• Physical examination finding develops according to the underlying situation

• Dehydration findings, mucous membrane dryness, jugular venous distension, pathological lung sounds, peripheral edema, turgor tone graying, palpable bladder, CHF, Pleural effusion

For diagnosis,

• CBC, electrolytes (including Mg and P), liver function tests, blood cultures

• Urine test, osmolality, urine Na and Urea level, culture if necessary

• Hypovolemia, base deficit, lactate, CVP or VCI, B type natriuretic factor

• ECG, hyperkalemia findings

• PA chest radiograph

• Bedside Urinary USG

Tumor lysis syndrome, renal artery and vein thrombosis should be considered in the differential diagnosis in the emergency department.

When GFR=0, serum creatinine level increases by 1-3 mg/dl/day. The creatinine level starts to increase 48 hours after ischemia.

A patient with a very low creatinine level at baseline may lose more than half of the nephrons without increasing in their creatinine. Extrarenal-caused Cr elevation (rhabdomyolysis, fenofibrate, low muscle mass) should be considered. Urine color and sediment formation may contain suggestive findings for diagnosis. In the emergency department, risky patients should be recognized, metabolic effects should be regulated, ongoing renal damage should be reduced, and iatrogenic damage should be prevented. First of all, life-threatening problems should be stabilized. Diagnosis and treatment should be applied synchronously. Hypovolemia, sepsis, MI, respiratory failure, acute CHF, electrolyte disturbances, acidosis, volume overload, urinary obstruction should be evaluated quickly.

If there is volume deficiency, crystalloids/Ringer lactate is preferred. Volume overload can be followed non-invasively by measuring VCI diameter. Contrast agents should be avoided in patients with a GFR of less than 30 ml/min/1.73 m2. Contrast material should be used in life-threatening situations, considering the benefit/loss ratio (such as major trauma, aortic dissection, ACS with ST Segment Elevation). Gadolinium should not be used because of its nephrogenic systemic fibrosis effect. In order to prevent the development of contrast media-induced nephropathy, at least 6 -10 cc/kg isotonic/RL infusion should be provided before and after the procedure. In the presence of postrenal causes, urinary flow should be applied in cooperation with nephrology, interventional radiology and urology. When the thickness of the renal parenchyma is unchanged or minimally reduced, the chance of response to treatment is high.

Emergency Dialysis Indications;

• Uncontrollable hyperkalemia (K>6.5 mmol/L or increasing)

• Uncontrollable fluid overload with persistent hypoxia or unresponsiveness to conservative measures

• Uremic pericarditis

• Progressive uremic/metabolic encephalopathy, seizure, asterix

• Serum Na<115 or >165 meq/L

• Life-threatening poisonings that respond to dialysis (salicylate, lithium, methanol, isopropanol, ethylene glycol)

• Coexistence of severe metabolic acidosis and AKI

• Bleeding due to uremia

High BUN/Cr level (BUN<100 mg/dL is recommended, it should be decided according to the patient

As a result; Removal of renal hypoperfusion and obstruction provides rapid improvement in prerenal and postrenal AKI. Volume depletion, drugs, infection, obstruction=55-79% are the causes and should be the first reason that comes to mind in the diagnosis. Prevention is easier than treatment. Preventive approaches should be applied in risky groups. Stabilization and differential diagnosis should be carried out together.

KONUŞMA ÖZETİ 8

MEDICAL EDUCATION IN THE COVID-19

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Tıp Fakültesi

Acil Tıp A.D.

In December 2019, a number of new cases of pneumonia were reported in Wuhan, China. The causative viral agent was identified as a new betacorona virus named SARS-COV-2, and the related infection was named “Coronavirus Disease 2019”. During the pandemic period, all service operation areas were effectively stopped, except for the most basic activities globally. Education has been disproportionately affected in this sense, as the gathering of the youngest members of society in closed spaces can significantly contribute to the spread of the identified virus (1).

More than 900 million students worldwide have been affected by the current situation (2). In our country, as of March 11, 2020, with the first case seen, some restrictions started. Within these restrictions, education activities in all primary/secondary education institutions and universities were suspended. It has created the need to reconstruct education in many fields, especially in medical education (1). There were two main reasons for this:

Due to the crisis that first emerged during the pandemic, all resources were primarily shifted to service delivery in order to support the health system, and academic institutions around the world were closed and the roles of academic education providers were reorganized (3). Second, due to the contagious nature of the pandemic, the number of non-essential staff in the clinical settings of hospitals was minimized. This led to the expulsion of actively trained medical students from the clinical setting. Also contributed during this period was the lack of coronovirus testing and personal protective equipment.

Medical education equips clinicians with the knowledge and skills to provide safe healthcare to patients. Traditional education methods were abandoned because both clinical training and lectures were not safe due to social distancing measures (4, 5). In addition to basic medical education, the education of residents limited their general experience and caused them to shift their service areas to emergency medicine and intensive care (6). The Accreditation Council for Graduate Medical Education (ACGME) and other regulatory bodies have required that residency students managing patients with suspected or confirmed COVID-19 have adequate supervision by their training institution (7). In the absence of such oversight, operations should be delayed to maintain a manageable and safe workload, and case discussions, department meetings should be canceled due to social distancing concerns, he said. In spite of all these negativities, innovative solutions were developed in active medical education. These:

Teleconference-webinars,

Online learning,

Social media,

Social consultancy-telemedicine,

Simulation and virtual reality,

In the presence of extraordinary emergency, current challenges can be turned into opportunities and enable education to advance and grow mainly through the availability of technological advances that can be incorporated into everyday medical education. Medical and surgical education has been severely affected by the COVID-19 pandemic, but this emergency has incidentally provided an impetus

for pedagogical innovation. However, the long-term impact of the pandemic on the educational gaps of medical students and residents is unknown.

Resources:

1- NicolaM, AlsafiZ, SohrabiC, KerwanA, Al-JabirA, Iosifidis C, et al. Thesocio-economicimplications of thecoronaviruspandemic (COVID-19): A review. Int JSurg2020; 78: 185-93.

2- en.unesco.org/covid19/educationresponce.

3- Rose S. Medicalstudenteducation in the time of COVID-19. JAMA 2020; 323: 2131-2.

4- Woolliscroft JO. Innovation in responsetothe COVID-19 pandemiccrisis. AcadMed 2020.

5- Reinholz M, French LE. Medicaleducationandcare in dermatologyduringthe SARS-CoV2 pandemia: challengessandchances. JEADV 2020; 34: e214-e216.

6- Pepe D, Martinello RA, Juthani-Mehta M. Involvingphysicians-in-training in thecare of patientsduringepidemics. J GradMedEduc 2019; 11: 632-4.

7- Potts JR. Residencyandfellowship program accreditation: Effects of thenovelcoronovirus (COVID-19) pandemic JACS 2020; 230: 1094-7.

KONUŞMA ÖZETİ 9

OVERACTIVE BLADDER

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Tıp Fakültesi

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International Consultation on Incontinence Research Society (ICI-RS) proposed that the terminology is slightly rephrased as: "overactive bladder syndrome (OAB) is characterized by urinary urgency, with or without urgency urinary incontinence (1) usually with increased daytime frequency and nocturia, if there is no proven infection or other obvious pathology. Based on data from international reports, The prevalence of OAB is 12-16% in both men and women over 40 years

old. Urinating frequency up to seven times during waking hours is considered normal.

However, this number varies depending on fluid intake during sleep hours and accompanying medical conditions.Nocturia is defined as one or more interruptions in sleep due to the need to urinate, but produces major discomfort (2). Nocturnal polyuria during the sleep period of the total 24-hour urine output producing more than 20% in the young and 33% in the elderly.Carers or relatives of the patient are disturbing the current symptoms and OAB can have a significant effect on quality of life so must that people need treatment .

OAB is associated with a complex of symptoms including urgency to urinate, frequent urination, urge incontinence, and nocturia, which seriously affect quality of life.Urinary frequency and urgency symptoms, both day and night, are troubling. It can only manifest itself with nocturne that appears at night.And is defined as wet with urge urinary incontinence or dry without urge urinary incontinence.

The aim of diagnosis is primarily to rule out serious risk factors that may cause excessive detrusor activity.Therefore, history, physical examination, and urinalysis should be performed to rule out underlying infection or other diagnoses (3). History, duration of complaints, total daily fluid intake, bladder irritant intake (such as sodas, artificial sweeteners, caffeine, and alcohol) ,and the use of drugs such as diuretics, urinary incontinence and type (wet, dry), urinary system infection, frequency of urination day and night, presence of complaints suggesting a neurological pathology, presence of family or history of diabetes mellitus, previous surgery, presence of stone-hematuria, dysuria, constipation, presence of obstructive complaints especially at advanced age in men, pregnancy, type and number of births in women, relationship between symptom onset and birth or menopause, whether hormone replacement therapy is applied or not ,voiding disorders in children are topics that must be questioned.Severity of symptoms, number of pads used that impact on quality of life and/or the use of validated questionnaires, and if there of pelvic floor symptoms (eg, bowel dysfunction, pelvic organ prolapse or dyspareunia) should also be questioned.

The bladder diary is more reliable and cheap than other examinations, but it is an objective test. It includes fluid intake, pad usage, incontinence episodes and the degree of incontinence. Episodes of urgency and sensation might also be recorded, as might be the activities performed during or immediately preceding the involuntary loss of urine.it usually maintained over a 24-hour period, as a way of helping to evaluate urinary frequency, urgency or incontinence.In addition, inquiry forms are used for diagnosis and treatment during evaluation. For this purpose, 31 different forms are used and 20 of them have been proven to be valid.

In physical examination, abdominal, neurological and genitourinary system examination should be performed.and a focused physical examination, including abdominal, pelvic and perineal examination and a brief neurologic examination; a cough test to demonstrate stress incontinence, if appropriate; and assessment of voluntary pelvic floor muscle contraction.Findings on genitourinary examination should include evaluation of pelvic floor muscle strength or tenderness, degree of vaginal mucosal estrogenization, periurethral masses, pelvic organ prolapse, and accompanying stress urinary incontinence.In addition, a general assessment of cognitive function, neurologic system including sacral neural pathways (perineal sensation, bulbocavernosus reflex, anal sphincter tone), and lower extremity edema should be evaluated, voiding disorder in children. Globe vesicale, benign prostatic hypertrophy in male patients. In female patientsvaginal prolapse, imperforate hymen, labia minora adhesion, vaginal and urethral atrophy should be evaluated absolutely.

Of the other tests, urine evaluation is of primary priority. Urine culture should be performed in the presence of nitrites or leukocyte esterase or if urinary tract infection is clinically suspected.Presence of hematuria in urinalysis requires additional testing, including cystoscopy and upper urinary tract imaging.Renal function should be evaluated by creatinine.Ultrasonography can be used effectively in the evaluation of both the upper and lower urinary tracts as a simple, noninvasive and cheap examination (5). If abnormal urine flow and significant residual are detected, pathology in the upper urinary system, frequently recurring urinary infection, hematuria, bladder deformity, significant neurological disorder, behavioral and medical treatment is not responding, further investigation should be performed.

In the differential diagnosis, polydipsia, cystitis, bladder pain syndrome, atrophic vaginitis and neurological disorders in menopausal women should be considered.

It is important to establish reasonable therapeutic goals for symptom control before initiating treatment.Patients should understand that acceptable symptom control can involve trial and error of various treatment modalities and is often a long-term process that requires adjustments to treatment plans and ongoing reassessment of treatments.Initial management includes behavioral change, avoidance of bladder irritants, treatment of constipation, weight loss, timed voiding by paying attention to total daily fluid intake.Options for oral medications include antimuscarinic agents and β-adrenergic agents and may be used following or in conjunction with behavioral therapy.In patients resistant to behavioral therapy and oral medications,Referral to a specialist (eg, a urologist or urogynecologist) should be considered for discussion of further treatments such as sacral neuromodulation, percutaneous tibial nerve stimulation, and intradetrusor injection of botulinum toxin A.

Behavioral therapy is considered first-line therapy, While the primary approach is to regulate bladder functions and voiding habits such as bladder training and delaying voiding, the secondary approach is to improve bladder outlet control and suppression of urgency.In addition to education about normal bladder function, it includes behavior modification, if polydipsia (target: 1.5-2 L), avoidance of bladder irritants, management of constipation, weight loss, gradual reduction of total daily fluid intake,With timed voiding, you may be referred to a pelvic floor muscle physiotherapist who specializes in bladder training and female pelvic health. Kegel and pelvic floor exercises will be beneficial (6).

Oral medications are considered second-line therapy and there are two classes of drugs: antimuscarinic agents and β-adrenergic agents.Acetylcholine released from parasympathetic nerves during normal micturition stimulates muscarinic receptors and creates detrusor contraction.These agents, which are used for therapeutic purposes, are effective in eliminating involuntary contractions by inhibiting the receptor level (7). Oral agent selection is determined by the side-effect profile, patient tolerance, and contraindications for use.antimuscarinic drugs are including oxybutynin, darifenacin, solifenacin, tolterodine, fesoterodine, and trospium.The side-effect profile generally limits continued use and includes dry mouth, dry eyes, constipation, blurred vision, indigestion, urinary retention, and impaired cognitive function.Cognitive decline ,dementia and Alzheimer's disease in continuous use (>3 years),Absolute contraindications include narrow-angle glaucoma, impaired gastric emptying, and patients taking solid oral forms of potassium chloride. Among the relative contraindications is high PVR and impaired or decreased cognitive function.The general principle of antimuscarinic drug use is to start at a low dose and increase the dose slowly to achieve acceptable symptom control while balancing the side-effect profile.Dry mouth can be reduce by oral lubricants or mouthwashes (avoid alcohol-based mouthwashes), sips of water, sugar-free candy, or gum.Dietary changes, fiber supplements, stool softeners, and regular exercise may be recommended if constipation occurs.

β-Adrenergic agents, β3-adrenergic agonists such as mirabegron. The benefit of this class is less anticholinergic side effects such as dry mouth and constipation.Therefore, they can be used in patients who cannot tolerate antimuscarinic drugs or who need to avoid antimuscarinic use.Side effects of β3 adrenergic agonists include increased blood pressure, nasopharyngitis, urinary tract infections, and urinary retention. severe uncontrolled hypertension,It is a contraindication to the use of β-adrenergic agonists. It is important to evaluate symptom control, compliance, side effects, achievement of treatment goals, and to discuss alternative treatment options or referral to a specialist.While waiting for side effects that limit the duration of drug use, 4 to 8 weeks of behavioral change or oral medical treatment should be allowed to produce a response (8).

Advanced therapies include intradetrusor injection of botulinum toxin A, sacral neuromodulation, and percutaneous tibial nerve stimulation.These treatment has its own risk/benefit profile, and appropriate patient selection and counseling is important before continuing with these treatments (9).

Intradetrusor botulinum toxin A Injection may be preferred in adults who cannot tolerate or do not respond adequately to anticholinergic drugs.The treatment is carried out by cystoscopic injection, which can be performed in the office environment under local anesthesia or sedation in the operating room environment.(The drug (typically 100 units) is injected across the bladder in roughly 20 aliquots.).The action of the drug is thought to be secondary to inhibition of the presynaptic release of acetylcholine and therefore muscarinic receptors in the bladder cannot be activated.Risks of the procedure include hematuria, urinary tract infection, and urinary retention.The urinary retention rate is between 4% and 10% and usually lasts for 8 weeks.

Sacral Neuromodulation is performed by a minimally invasive procedure that uses percutaneous insertion of a lead with electrodes through the S3 foramen to stimulate S3 nerve roots.The lead itself is excited by a pulse generator. The leads are thought to modulate the sacral afferent nerves and in turn help balance neural reflexes between the bladder, sphincter, and pelvic floor muscles.

Percutaneous Tibial Nerve Stimulation is performed by inserting a peripheral needle that stimulates the posterior tibial nerve.(Treatment is performed in an office setting and involves the use of a small percutaneous needle electrode (34 Gauge) being placed near the posterior tibial nerve at the level of the medial malleolus.).The needle is then stimulated via an external pulse generator. Electrical impulses are transmitted along the tibial nerve to the S3 segment of the pelvic sacral plexus, allowing it to affect voiding reflexes. At the end of the 30-minute treatment session, the needle is removed.Treatments are then performed weekly for 12 weeks, and those with adequate improvement are switched to maintenance therapy (roughly every 3 weeks).Contraindications to this treatment include patients with bleeding tendencies, peripheral neuropathy, pacemakers, and patients who are pregnant or considering becoming pregnant during treatment.Indwelling catheter use is not recommended and should be considered as a last resort in selected patients because of the risks of urinary tract infection, urethral erosion of the Foley catheter, bladder neck injury, and urolithiasis .Management with absorbent pads/clothing is preferable to indwelling foley catheter placement. An exception to this may be when urinary incontinence results in progressive decubitus. In such a situation, it is preferable to use a suprapubic catheter instead of a transurethral catheter because of the risk of urethral erosion. Augmentation cystoplasty and urinary diversion are rarely considered.

In summary; It is quite common in women.After a complete history and physical examination, a normal urinalysis should be performed. Depending on the clinical scenario and patient preference, this may include behavioral changes, pelvic floor physical therapy and/or medications. If the complaint persists , specialist referral should be considered to discuss further treatments; such as PTNS, SNM, or intradetrusor injection of botulinum toxin A.

RESOURCES:

1- Haylen BT, de Ridder D, Freeman RM, Swift SE, Berghmans B, Lee J, et al. An international urogynecological association (IUGA)/international continence society (ICS) joint report on the terminology for female pelvic floor dysfunction. Neurourol Urodyn 2010; 29: 4.

2- Abrams P. Standardisation Sub-committee of the International Continence Society. The standardisation of terminology of lower urinary tract function. Neurourol. Urodyn., 2002 - ci.nii.ac.jp

3- Gormley EA, Lightner DJ, Faraday M, Vasavada SP, American Urological Association; Society of Urodynamics, Female Pelvic Medicine. Diagnosis and treatment of overactive bladder (non-neurogenic) in adults: AUA/SUFU guideline amendment. J Urol. 2015; 193: 1572-80.

4- Ürolojik Cerrahi Derneği Güncelleme Serisi, Alt Üriner Sistem Semptomlarında Sorgulama Formları, 2021; 10(1): 9-21.

5- Li R, Nagle AS, Maddra KM, Vinod N, Prince SA, Tensen SI, et al. Irregular bladder shapes identified in women with overactive bladder: an ultrasound nomogram. Am J Clin Exp Urol 2021; 9: 367-77.

6- Wang JW, Liu JC, Meng LF, Zhang W, Liu XD, Zhang YG. Quality of life and related factors in patients with interstitial cystitis/bladder pain syndrome. Beijing Da Xue Xue Bao Yi Xue Ban. 2021; 53: 653-8.

7- Welk B, Richardson K, Panicker JN. The cognitive effect of anticholinergics for patients with overactive bladder. Nat Rev Urol 2021; 18: 686-700.

8- Kang TW, Kim SJ, Kim MH, Jung JH. Beta 3 Adrenoreceptor Agonist for the Management of Lower Urinary Tract Symptoms in Men With Benign Prostatic Hyperplasia: A Systematic Review. Int Neurourol J. 2021; 25: 182-91.

8- Yildiz N, Alkan H, Sarsan A. Efficacy of intravaginal electrical stimulation added to bladder training in women with idiopathic overactive bladder: A prospective randomized controlled trial. Int Braz J Urol. 2021; 47: 1150-9.

KONUŞMA ÖZETİ 10

The Clinical Place and Importance of Clubbing Deformity

Dr. Shejda Amet

- *Abstract:* Digital clubbing is an ancient and important clinical signs in medicine. Although clubbed fingers are mostly asymptomatic, it often predicts the presence of some dreaded underlying diseases. Its exact pathogenesis is not known, but platelet-derived growth factor and vascular endothelial growth factor are recently incriminated in its causation.We will discuss ,the association of digital clubbing with various disease processes and its clinical implications .
- *Definition:* Clubbing is a bulbous uniform swelling of the soft tissue of the terminal phalanx of a digit, with subsequent loss of the normal angle between the nail and nail bed.
- *History:* It was first described by Hippocrates nearly 2500 years ago in a patient with empyema. Because of this, it is often described as Hippocratic finger and is regarded to be the oldest sign in clinical medicine. Later on, it was found to be associated with a variety of clinical conditions including bronchiectasis, lung cancer, cirrhosis of liver, cyanotic congenital heart disease, etc.

- *Different stages of Clubbing :* In the initial stage, there occurs peri-ungual erythema and softening of nail bed. On palpation, it gives a spongy sensation. In the next stage, increase in the normal 160° angle between the nail bed and the proximal nail fold occurs, resulting in convexity as the nails grow. At this stage, finger develops a clubbed appearance. Finally, the nail and peri-ungual skin appear shiny and nail develops longitudinal ridging. This whole process usually takes years but in certain conditions, clubbing may develop sub-acutely (e.g. lung abscess, empyema thorasis). Although different grading of clubbing has been described, it has no clinical significance.

Grade 1	Fluctuation and softening of the nail bed
Grade 2	Increase in the normal 160° angle between the nail bed and the proximal nail fold.
Grade 3	Accentuated convexity of the nail
Grade 4	Clubbed appearance of the fingertip
Grade 5	Development of a shiny or glossy change in nail and adjacent skin with longitudinal striations

- *Types: -Congenital;*

  -Idiopathic;

  -Acquired.

  - *Associated clinical conditions:*

Suppurative intra-thoracic diseases
Lung abscess
Empyema thoracic
Bronchiectasis
Cystic fibrosis
Chronic cavitary mycobacterial or fungal infection
Intrathoracic neoplastic disease
Bronchogenic carcinoma
Metastatic cancers[14]
Malignant mesothelioma[15]
Other miscellaneous malignancies
Hodgkin lymphoma, thymoma,[16] pulmonary artery
Sarcoma,[17] nasopharyngeal carcinoma[18,19] usually after
distant metastases, pleural fibroma,[20] rhabdomyosarcoma,[21]
Primary lymphosarcoma of lung[22]
Diffuse pulmonary diseases
Idiopathic pulmonary fibrosis
Asbestosis
Pulmonary arterio-venous malformations
Cardiovascular diseases
Cyanotic congenital heart disease
Infective endocarditis
Aortic aneurysm
Atrial myxoma
Gastrointestinal diseases
Inflammatory bowel disease
Celiac disease
Lymphoma of the gastrointestinal tract, colonic and gastric carcinoma
Infestations (amoebiasis, ascariasis)
Hepatobiliary disorders
Chronic active hepatitis
Cirrhosis—particularly biliary and juvenile
Endocrine disorders
Thyroid acropathy
Severe secondary hyperparathyroidism
Laxatives overuse,[23,24] interferon alfa-2A[25]

- *In Lung Cancer:* Malignant neoplasm of the lung is the predominant pulmonary cause of clubbing, contributing to nearly 90% of cases. Among the different types of thoracic malignancy, lung cancer is responsible for 80% cases of clubbing. Whereas pleural tumors and other intrathoracic and mediastinal growth contribute to 10% and 5% cases, respectively. On the other hand, the prevalence of clubbing in lung cancer patient ranges from 5% to 15%.It is most common paraneoplastic syndrome in lung cancer patients. Clubbing is relatively uncommon in small cell lung carcinoma . Most studies did notice a male predominance of clubbing in lung cancer patients. The megakaryocyte/platelet hypothesis appears quite reliable in explaining

digital clubbing in lung cancer patients. Also reported increased serum transforming growth factor (TGF ß1) level in primary lung cancer patients with clubbing.

- *In Other Intrathoracic Neoplastic Disease:* There are few case reports of digital clubbing occurrence in malignant mesothelioma, pleural fibroma, and metastatic osteogenic sarcoma. There are noticed finger clubbing based on abnormal fluctuation of nail bed in 30% of the mesothelioma and 14% of benign asbestos pleural disease. Solitary fibrous tumor of pleura is less common than malignant mesothelioma. They often develop characteristic paraneoplastic syndrome of clubbing, HOA, and hypoglycemia, not typically seen with mesothelioma. Also reported the association of inflammatory pseudo tumor with digital clubbing . Pulmonary metastases from extrathoracic neoplasms are rare cause of clubbing and HPOA. Most of the reported cases have been sarcomas, mainly of bone and soft tissues; among the rest are tumors of the nasopharynx and uterus and cervix and renal cell carcinoma. Hodgkin's lymphoma is rarely associated with digital clubbing. Characteristically, clubbing is mainly seen in the presence of intrathoracic involvement and in children and adolescents.

- *In Interstitial Lung Disease:* Among different ILDs, digital clubbing is most commonly noted in idiopathic pulmonary fibrosis (IPF).There is reported clubbing in 67% of patients.Rarely occurs in sarcoidosis. Asbestosis is another ILD where clubbing is commonly seen (43% of patients).

- *In Gastrointestinal Disease:* Complicating inflammatory bowel disease has been frequently reported,its association with secondary HOA has been very rarely found. Digital clubbing is more commonly noted in Crohn's disease than in ulcerative colitis . Clubbing incidence of 38% and 15% in patients with Crohn's disease and ulcerative colitis. Megakaryocytes or platelet or their derivatives may play a role in the pathogenesis of clubbing in inflammatory bowel disease. Also are detected increased circulating platelets aggregates as well as an increase number of platelets in patients with Crohn's disease. Normally, P-selectin (a surface marker of platelet activation) expression is greater in finger tip capillary blood than in venous blood; this difference is further increased in Crohn's disease. So platelets are more susceptible to activation in the micro-circulation in Crohn's disease which could result in increased release of PDGF. Behcets disease and hepato-pulmonary syndrome are rare causes of clubbing. Vasculitis of digital vasculature by impairing endothelial functions promote platelet aggregate ,but has also been described in other liver diseases, such as portal cirrhosis, secondary hepatic amyloidosis, alcoholic cirrhosis, and biliary atresia on and may cause clubbing. Digital clubbing is mainly reported in biliary cirrhosis.

- *In Endocrine Disease:* Clubbing has been reported in few endocrine conditions: Thyroid acropachy, hyperparathyroidism. Thyroid acropachy is an extra-thyroidal manifestation of autoimmune thyroid disease and is frequently

associated with dermopathy and ophthalmopathy. It is characterized by clubbing and swelling of the fingers and toes, with or without periosteal reaction of the distal bones. The typical features of clubbing and periostitis seen in thyroid acropachy are often different from other causes of clubbing:

-Periosteal reaction can be asymmetric but in pulmonary osteoarthropathy, usually is symmetric.

-Radiographs show a characteristic subperiosteal spiculated, frothy, or lacy appearance, whereas in classic pulmonary osteoarthropathy, there is laminal periosteal proliferation.

-Autoimmune phenomena, increased glycosaminoglycan and fibroblast proliferation explain the pathological changes of clubbing in thyroid acropachy.

-Less commonly involve proximal long bones and periarticular areas, which occurs in rheumatoid arthritis and metabolic disorders including hyperthyroidism.

- *In HIV Disease:* Only few case reports are there linking HIV infection and clubbing. There are reported 36% incidence of clubbing in HIV infected outpatients. Clubbing in HIV-infected patients has generally been attributed to concomitant pulmonary infection. Also there are asserted that clubbing is more often present in patients with prior tuberculosis (TB).

  -Mechanisms :- Underlying pulmonary disease including lymphocytic interstitial pneumonia;

  - HIV infection per se;

  - HIV-associated rheumatologic manifestation like HPOA.

- *In Cardiovascular Disease:* Infective endocarditis usually causes a milder form of clubbing. In congenital cyanotic heart disease, gross, drumstick appearance may be seen. However, one Mexican study reported a higher frequency of HOA of 31% in congenital cyanotic heart disease.

- *In Pulmonary Tuberculois:* There are several case reports of its occurrence in TB patients. Studies from endemic areas of TB have shown a 30% frequency of clubbing amongst smear-positive TB patients. One Indian study also reported a very high frequency of digital clubbing (82%).Also there are reported associations of clubbing with severity of disease, cavitary TB, and hypoalbuminemia, indicative of chronic disease. But it was more common among patients with a lower Karnofsky performance scale score or with prior TB.

Unilateral Clubbing:

In some conditions it may occur . Usually associated with local vascular lesions of the arm, axilla, and thoracic outlet and with hemiplegia. Particularly of the subclavian artery, is commonly reported. Although aorta and innominate artery aneurysm have also been reported. It occur in the hemiplegic arm, including unilateral clubbing, sparing of arthritis, unilateral eczema, minimal erythema , and feeling of coldness in the hemiplegic arm.In hemiplegics patients are reported a 14% incidence of unilateral clubbing. There are noticed development of clubbing 60-120 months after the stroke. In vascular graft sepsis, clubbing involves digits distal to the graft.

-Theories of mechanisms :-Endotoxin;
-Chronic infection;
-Neorogenic theory.

Diferential Clubbing:

In digital mucoid cysts,osteoid osteoms and mixo or endochroma it may occur.Selectively it ocuur in distal extremities. Mostly it is associated with patent ductus arteriosus,however with Pulmonary Hypertansion and shunt from right to left heart.Also there are raported in Aneurysm of Abdominal Aorta.

Congenital Clubbing:

Is usually symmetrical and bilateral, but different fingers and toes may be involved to varying degrees.There are reported a homozygous missense mutation in the human HPGD gene located at 4q33-q34. HPGD gene encodes the NADP-dependent 15-hydroxyprostaglandin dehydrogenase (15-PGDH) enzyme. 15-PGDH is involved in the catabolism of prostaglandin E2 (PGE2). Also found mutation in 15-PGDH. Chronically elevated prostaglandin E2 levels may be responsible for various clinical manifestations of clubbing. PGE2 stimulates the activity of both osteoblasts and osteoclasts, thereby causing both bone deposition (periostosis) and resorption (acro-osteolysis).

Pseudoclubbing:

Is an atypical presentation of clubbing, characterized clinically by asymmetrical involvement of the fingers. Radiographically by acro-osteolysis. It has been described in chronic renal failure, subungal hemangioma, acrometastases, systemic sclerosis, etc. Profile sign is usually normal and there is usually asymmetrical nails involvement. Acro-osteolysis is classically present instead of soft tissue swelling of nail bed in clubbing. There are no signs of periostitis or synovial effusion.

- *Assesment of Clubbing:-* physical examination;

  -plethysmography;

  -digital casts;

  -shadowgraph technique. ;

  -digital cameras and computerized analysis.

- *Different signs :*
  - Profil sign or Lovibond`s angle: It was proposed by Lovibond in the year 1939 . It is defined by the angle made by nail as it exists from the proximal nail fold. In normal subjects, profile angle is usually less than 180°.
  - Hyponychial angle: It is constructed by drawing a line from distal digital crease to the cuticle and another line from the cuticle to hyponychium which is the thickened stratum corneum of epidermis lying under the free edge of the nail. Normal hyponychial angle is less than 192°. Is a preferred objective criterion.
  - Phalangeal depth ratio : It is defined by the ratio of digit's depth measured at the junction between skin and nail (nail bed) and at the distal interphalangeal joint. Normally, the depth at distal interphalangeal joint is more than the depth at nail bed. This ratio is also independent of age, sex, and ethnicity of population. A Phalangeal depth ratio of over 1 is indicative of clubbing. It can be measured by a caliper or a digital photograph.
  - Digital Index: It is the sum of phalangeal depth ratio for all 10 fingers. Although a phalangeal depth ratio of 1.0 or greater in

any finger is suggestive of clubbing, is more specific for clubbing.

- Scramoth sign: This sign is named after Dr. Schamroth. This sign is elicited by placing the dorsal surfaces of terminal phalanges of corresponding right and left fingers together. Normal fingers create a diamond-shaped window when the dorsal surfaces of terminal phalanges of similar fingers are opposed to each other . In patients with clubbing, this diamond-shaped window gets obliterated.

- *Pathogenesis:* There are found significantly higher plasma growth hormone levels than patients without clubbing. Also are hypothesized that clubbed digits resemble the human embryonic fingers and toes, and may represent the return of the embryonic claw that we have lost during evolution. Pathologic condition by altering hormone levels in the blood, activates the “dormant” genes and resulting in the development of clubbing. (for ex.Cytokines). Megakaryocyte or platelet clusters, lodged in the peripheral vasculature of the digits, release platelet-derived growth factor (PDGF) and lead to the increased vascularity, permeability, and connective tissue changes that are the hallmark of clubbing. They also noted significant increase in VEGF, PDGF, and hypoxia inducible factor expression in clubbed digits compard with controls.

- *Pathology:*

  1. Increased soft tissue in the fingertips of clubbed fingers;
  2. Local vascular neogenesis;
  3. Increase width of nail-fold capillary.

- *Treatment:* Treatment to underlying disease and with or without dermatological therapy.

I. Case report:

-A 53 years old male,presented with 1 weeks cough ,headache,weakness.Also with anamnesis chronic obstructive bronchial disease.There is with positive anamnesis for smoking and with familiar anamnesis for pulmonary disease.

-SpO2 97%.

-auscultation : predomination in basal parts pathological sounds.

-Laboratory analysis: Leukocytes (high),others in normal references.

-radiography: chronic peribronchial alterations,reactive left hilus,right hilus with parenchymal consolidation.

-treatment: Antibiotic,analgetics,corticosteroid.

II. Case report:

-A 51 years old male,presented with 2 week productive and mix cough ,dyspnea ,joint pain,with familiar anamnesis for cardiovascular disease. There is with positive anamnesis for smoking.

-SpO2 88 %.

-auscultation : antero -posterior an basal with apical parts pathological sounds.

-Laboratory analysis: Leukocytes ,PLT and CRP (high),others in normal references.

-radiography:confluent parenchymal alterations and reactive left hilus,right hilus.

-treatment: Antibiotic,analgetic,Aminophyline.

References: - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3519022/;
- PubMed;
- Harrison İnternal Medicine;

KONUŞMA ÖZETİ 11

Management of Pancreatitis

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Pancreatitis is an inflammatory process of the pancreas that can cause local injury, systemic inflammatory response syndrome, and organ failure. In many patients, acute pancreatitis has a mild form and a disease state with a mortality rate of <1%, which generally resolves with only supportive care, but a small proportion of patients are severe and can be fatal. The most common causes of AP remain gallstones and alcohol, which together comprise 80% of cases; the remainder of cases are due to less common causes, including drug reactions, pancreatic malignancies, and hypertriglyceridemia. Acute pancreatitis causes acute, severe, and persistent abdominal pain, usually associated with nausea, vomiting, anorexia, and decreased oral intake

The diagnosis of AP requires at least the presence of two of the three following criteria: (1) characteristic abdominal pain, (2) biochemical evidence of pancreatitis (serum amylase and/or lipase greater than three times the upper limit of normal), and (3) characteristic findings from abdominal imaging. In patients who meet the clinical presentation and laboratory criteria, routine early CT, with or without IV or PO contrast, is not recommended. Early CT scan will not show necrotic/ischemic areas, and will not modify the clinical management of the illness. Optimal timing for first the CT assessment is 72–96 h after onset of symptoms. On admission, ultrasound (US) should be performed to determine the etiology of acute pancreatitis.

The most commonly used classification system for acute pancreatitis is the 2012 revision of the Atlanta classification and definitions based on international consensus. Severity is classified as mild, moderate, or severe. The mild form has no organ failure, local or system complications, and usually resolves in the first week. Moderately severe pancreatitis is characterized by transient local or systemic complications or transient organ failure (<48 hours). Patients with persistent (more than 48 h) organ failure have the severe form of the disease.

There are no “gold standard” prognostic score for predicting severe acute pancreatitis. Probably the bedside index of severity of acute pancreatitis (BISAP) score is one of the most accurate and applicable in everyday clinical practice because of the simplicity and the capability to predict severity, death, and organ failure as well as the APACHE-II (very complex) and other scores.

Fluid therapy to prevent hypovolemia and organ hypoperfusion is a long-established cornerstone of the initial management of Acute pancreatitis. The American Gastroenterological Association (AGA) suggests using goal-directed therapy for fluid management. Goal-directed therapy isgenerally defined as the titration of intravenous fluids to specific clinical and biochemical targets of perfusion (eg, heart rate, mean arterial pressure, central venous pressure, urine output, blood urea nitrogen concentration, and hematocrit). The AGA makes no recommendation whether normal saline or Ringer's lactate is used. Persistent organ dysfunction or organ failure occurrence despite adequate fluid resuscitation is an indication for ICU admission.

Routine prophylactic antibiotics are no longer recommended for all patients with acute pancreatitis. Prophylactic antibiotics had no impact on the rates of important outcomes, such as persistent single organ failure, multiple organ failure or multiple organ dysfunction of unclear duration, single organ failure of unclear duration, and hospital length of stay. In patients with infected necrosis, the spectrum of empirical antibiotic regimen should include both aerobic and anaerobic Gram-negative and Gram- positive microorganisms.

Early endoscopic retrograde cholangiopancreatography in patients with predicted severe acute gallstone pancreatitis without cholangitis or common bile duct obstruction cannot be recommended at this time

Enteral nutrition is recommended to prevent gut failure and infectious complications. Total parenteral nutrition (TPN) should be avoided but partial parenteral nutrition integration should be considered to reach caloric and protein requirements if enteral route is not completely tolerated. In patients with predicted severe or necrotizing pancreatitis requiring enteral tube feeding, the AGA suggests either nasogastric or nasoenteral route.

In patients with acute biliary pancreatitis, the AGA recommends cholecystectomy during the initial admission rather than after discharge. Cholecystectomy can clearly

prevent recurrent episodes of AP after an index case of biliary or gallstone pancreatitis.

Consider admission for a first bout of acute pancreatitis, for any case of biliary pancreatitis, and for patients needing frequent IV pain medication, not tolerating oral intake because of vomiting or increasing pain, with persistent abnormal vital signs, or with any signs of organ insufficiency.

References

1. Crockett SD, Wani S, Gardner TB, Falck-Ytter Y, Barkun AN; American Gastroenterological Association Institute Clinical Guidelines Committee. American Gastroenterological Association Institute Guideline on Initial Management of Acute Pancreatitis. Gastroenterology 2018;154(4):1096-1101. doi: 10.1053/j.gastro.2018.01.032.
2. Leppäniemi A, Tolonen M, Tarasconi A, Segovia-Lohse H, Gamberini E, Kirkpatrick AW, et al . 2019 WSES guidelines for the management of severe acute pancreatitis. World J Emerg Surg. 2019;14:27. doi: 10.1186/s13017-019-0247-0. eCollection 2019.
3. Cevik Y, Kavalci C, Ozer M, Daş M, Kiyak G, Ozdoğan M.The role of urine trypsinogen-2 test in the differential diagnosis of acute pancreatitis in the Emergency Department. Ulus Travma Acil Cerrahi Derg. 2010 Mar;16(2):125-9.
4. Besinger B, and Stehman CR. "Pancreatitis and Cholecystitis." Tintinalli's Emergency Medicine: A Comprehensive Study Guide,9'th e. Eds. Judith E. Tintinalli, et al. McGraw Hill, 2020; 508-512

KONUŞMA ÖZETİ 12

INHOSPITAL BASIC LIFE SUPPORT (HASTANE İÇİ TEMEL YAŞAM DESTEĞİ)

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TYD TANIM

Solunum ve dolaşımı durmuş bir kişiye koruyucu ekipman ve ulaşılabilirse otomatik eksternal defibrilatör (OED) dışında herhangi bir tıbbi ekipmana ihtiyaç duyulmadan yapılan yeniden canlandırma (Kardiyo-Pulmoner Resüsitasyon=KPR) işlemidir.

TYD AMAÇ

Kardiyak arrestin altında yatan neden geri döndürülünceye kadar, yeterli dolaşımın ve solunumun sürdürülmesidir.

Hastane dışı KPR başarı oranı < %6 iken Hastane KPR başarı oranı %13. Bu oran hastane içinde yapılan KPR uygulamalarının önemini göstermektedir.

KPR UYGULAMALARINDA ZAMANIN ÖNEMİ

0-1 dakika---Prognoz iyi, kardiyak irritabilite olabilir

0-4 dakika---Geri dönüşsüz beyin hasarı beklenmez

4-6 dakika---Beyin hasarı görülebilir

6-10 dakika---Beyin hasarı olasılığı yüksek

10 dakika---İrreversible beyin hasarı

SAĞ KALIM ORANLARI

KPR yapılmamış- gecikmiş DF: %0- 2

Erken KPR- gecikmiş DF: %2-8

Erken KPR- erken DF: %20

Erken KPR- çok erken DF- Erken İYD: %30

Etkili resüsitasyonun başlamasındaki gecikmelerin azalması nedeniyle hastane içi kardiyak arrestlerde (HİKA) elde edilen sonuçlar, hastane dışı kardiyak arrestlerden (HDKA) elde edilen sonuçlardan genel olarak üstündür.

Hastanede bir arrest meydana geldiğinde, güçlü bir multidisipliner yaklaşım, müdahale eden, KPR sağlayan, derhal defibrilasyon uygulayan, İYD önlemlerine başlayan ve ROSC sonrası bakıma devam eden ekipleri içerir.

BİLİNÇ DURUMU KONTROLÜ

Bilinci açık hasta

Acil tıbbi değerlendirme gereklidir. Lokal protokollere uygun olarak resüsitasyon ekibi görev alabilir (örn. Tıbbi Acil Ekibi, Hızlı Yanıt Ekibi). Bu ekip beklenirken oksijen veriniz, monitörize ediniz ve damaryolu açınız.

Bilinci kapalı hasta

Sıralama personelin solunum ve dolaşımın değerlendirilmesiyle ilgili eğitimine ve deneyimine bağlıdır. Eğitilmiş sağlık personeli bile solunum ve nabzı kardiyak arresti net olarak teyit edecek şekilde değerlendiremeyebilir.

- Kardiyak arrest başlangıcında epilepsiyle karıştırılabilecek kısa süreli nöbete benzer tablo görülebilir. Deri renginde değişiklikler, özellikle solukluk ve siyanoza bağlı morluklar kardiyak arreste özgü değildir.

Yardım için sesleniniz (henüz çağrılmadıysa) Hastayı resüsitasyon için uygun pozisyona (sırt üstü???) getiriniz.

Kardiyak arrestin erken döneminde agonal solunum (aralıklı iç çekme, yavaş, zorlu veya gürültülü solunum) sıktır ve kardiyak arrest belirtisidir, yaşam belirtisi olarak değerlendirilmemelidir.

Göğüs kompresyonları sırasında serebral perfüzyon düzeldikçe de agonal solunum görülebilir ancak SDGD göstergesi değildir.

2020 AHA KLAVUZU YENİLİKLERİ

Yeni literatürde de KPR'ye kompresyon ile başlanmasının KPR'nin ilk döngüsünün erken tamamlanabilmesi ile ilişkili olduğunu göstermiştir. Ancak uzun süre ventilasyonsuz KPR uygulaması arteriyel oksijen içeriğini düşüreceğinden kompresyon + ventilasyon'dan daha az etkindir. Bu sebeple asfiksiye bağlı arrest gibi durumlarda eğer kurtarıcı sağlık çalışanı ise ve bu durumu değerlendirebiliyor ise KPR'de sıralamalar duruma göre değişebilir.

Dolaşım belirtilerini değerlendiriniz:

-Nabzın alınamadığından emin olmak zor olabilir. Hastada yaşam belirtileri yoksa (bilinç, anlamlı hareket, normal solunum veya öksürme) veya şüphe varsa hemen KPR'a başlayın ve daha deneyimli bir ekip gelene kadar veya hastada yaşam belirtileri görülene kadar devam ediniz. Kalbi çalışan bir hastada göğüs kompresyonları uygulanmasının zarar verme olasılığı zayıftır. Ayrıca kardiyak arrest tanısını koymada ve KPR uygulamasında gecikme sağkalımı olumsuz etkileyecektir. Bu nedenle emin olunamadığı durumlarda tercihimiz kompresyonların başlamasından yana olmalıdır.

Etkili bir göğüs basısının özellikleri;

Göğüs basısının uygun hızda olması

Göğüs basısının uygun derinlikte gerçekleşmesi

Basılar arasında göğsün tamamen dolmasına izin verilmesi

Basılar arasındaki duraklamanın minimale indirilmesi

Yanlış el pozisyonu: Organ yaralanması

Bası arasında gevşemeye izin verilmemesi

Zıplayan kompresyonlar

Sternumu yeterince çöktürememe

Sternumu fazla çöktürme

Heimlich manevrasında yanlış el pozisyonu

ABDOMİNAL KOMPRESYON

Araya giren abdominal kompresyon KPR'si, kullanımı konusunda eğitimli yeterli personel mevcut olduğunda hastane içi resüsitasyon sırasında düşünülebilir. (Class 2b) Araya giren abdominal kompresyon KPR'si, alternatif abdominal kompresyonlarla kombine edilmiş geleneksel göğüs kompresyonlarını içeren 3 kurtarıcılı bir tekniktir. Eğitimli kurtarıcılar tarafından uygulanan abdominal kompresyon KPR'si, yetişkin HİKA için geleneksel KPR ile karşılaştırıldığında, kısa süreli sağkalımı ve hastaneden taburcu olana kadar sağkalımı iyileştirdiğini gösteren çalışmalar mevcuttur.

Havayolunu açık tut, solumayı kontrol etmek için «bak, dinle, hisset» Göğüs hareketlerine BAK, Ağızdan soluma sesleri geliyor mu DİNLE, Yanağına çarpan havayı HİSSET.

Bası Fraksiyonu: Bası ile geçen zamanın, toplam KPR süresine oranı. Havayolu açıklığı sağlanmayan olgularda %60'da fazla olmalı (Sınıf IIb, KD C-LD). 10 dk KPR yapıldıysa, hastaya en az 6 dk göğüs basısı uygulanmalıdır. 2 kurtarıcı soluk sırasında basıya 10 saniyeden daha fazla ara vermeyin (Sınıf IIa, KD C-LD)

DEFİBRİLASYON

Arrest kurbanları için tek farklı tedavi kurtarıcıların VF/nabızsız VT hastalarını defibrilatör şokları ile tedavi etmesidir. Diğer tüm girişim ve tedaviler aslında destekleyici ve palyatif tedavilerdir. Defibrilasyonsuz geçen her dakika yaşam şansını %7 azaltır.

TYD uygulayıcıları normal soluk almayan ancak nabzı bulunan yanıtsız hastalardan opioid bağımlılığı olduğu bilinen ya da bağımlılık şüphesi duyulanlara, IM / SC Nalokson kullanımı Solunum arrestlerinde kullanımı: Sınıf I öneri, Kanıt düzeyi C-LD Nalokson otoenjektörinin halktan kurtarıcılar ve sağlık personelleri tarafından kullanımı FDA onayı 2014 alınmıştır.

Gebelik

Manuel sol uterin manipülasyon, Maternal arrestin ilk 4 dakikasında perimortem sezaryen uygulaması Gebe kardiyak arrestlerin yönetiminde, aortokaval kompresyonun azaltılması için sol lateral pozisyon tercih edilmelidir(Tekrar onaylandı) Standart resusitasyon önlemleri ve sol lateral pozisyonun sağlanmasına rağmen ritmin spontan geri dönüşünün sağlanmadığı gebe arrestlerde, eğer fundus yüksekliği umblikusu geçiyorsa resusitasyon sürerken bebeğin tahliyesi planlanmalıdır. Perimortem sezaryen ideal olarak arrestin ilk 5 dakikasında uygulanmalıdır.