Aksaray University Journal of Medicine Sciences
Aksaray Üniversitesi Tıp Bilimleri Dergisi

asujms 2025; 5(1): 36-38

Case Report

Unexpected Outcome in a Patient Presenting with Syncope: Splenic Laceration

Senkop ile Başvuran Hastada Beklenmedik Son: Dalak Laserasyonu

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Abstract

The spleen is one of the most commonly injured organs in blunt trauma. Typical symptoms of splenic injury include left-sided abdominal pain, peritonitis and hypovolemic shock. Kehr's sign can be seen in approximately 20% of cases. It is rare to have a splenic injury with a comfortable abdominal examination and no complaint of abdominal pain.

A 68-year-old male patient was admitted to the emergency department with the complaint of fainting after feeling dizzy at the exit of a mosque. At the time of presentation, blood pressure was 126/68 mmHg, pulse rate 86/min, SpO2 97%, temperature 36.4 °C, fingertip blood glucose 98 mg/dL and he had no active complaints. On physical examination, GCS was 15, oriented and cooperative and neurologic examination was normal. There was no defense, rebound and tenderness on abdominal examination. Rectal examination was characterized by colicky fecal smearing. There were no acute pathologic findings on brain CT. The patient whose vitals were stable during follow-up examination stated that he felt dizzy again when he was lifted from the stretcher during the control examination. Vital signs were checked and blood pressure was 70/40 mmHg. The patient stated that he had a new onset of abdominal pain. When the anamnesis was deepened, he stated that he hit his left side on the pavement while falling, but he did not mention it at the time of the first anamnesis because he was not in pain. Splenectomy was performed after abdominal imaging revealed splenic injury and the patient was consulted with general surgery.

With this case report, we aimed to remind once again the importance of a thorough anamnesis and detailed questioning of trauma history in addition to non-traumatic causes and the importance of control examinations in a patient presenting with syncope.

Keywords: Spleen Laseration; Syncope; Trauma

Öz

Künt travmalarda en sık yaralanan organlardan biri dalaktır. Dalak yaralanmasının tipik semptomları, sol taraflı karın ağrısı, peritonit ve hipovolemik şoktur. Olguların yaklaşık %20'inde Kehr bulgusu görülebilir. Dalak yaralanması olup hem batın muayenesi rahat olup hem de hastanın karın ağrısı şikayetinin olmaması nadir bir durumdur.

68 yaşındaki erkek hasta acil servise cami çıkışında başı döndükten sonra bayılma şikâyeti ile başvurdu. Başvuru anında kan basıncı 126/68 mmHg, nabız 86/dk, SpO2 %97, ateş 36,4 °C, parmak ucu kan şekeri 98 mg/dL olarak ölçüldü ve aktif herhangi bir şikayeti yoktu.. Hastanın fizik muayenesinde; GKS 15, oryante koopere olup nörolojik muayenesi normaldi. Batın muayenesinde defans, rebaund ve hassasiyet yoktu. Rektal muayenesini kolik gayta bulaşı idi. Hastanın beyin BT'sinde akut patolojik bulgu yoktu. Takiplerinde vitalleri stabil seyreden hasta kontrol muayenesi esnasında sedyeden kaldırıldığında tekrar baş dönmesi olduğunu beyan etti. Vitalleri kontrol edilen hastanın kan basıncı 70/40 mmHg olarak ölçüldü. Hasta yeni başlayan bir karın ağrısı olduğunu ifade etti. Anamnez derinleştirildiğinde düşerken sol yan tarafını kaldırıma çarptığını ancak ağrısı olmadığı için ilk anamnez anında belirtmediğini ifade etti. Batın görüntülemelerinde dalak yaralanması tespit edilen ve genel cerrahi ile konsülte edilen hastaya splenektomi yapıldı.

Bu olgu sunumu ile senkop ile başvuran hastada non-travmatik sebeplerin yanı sıra anemnez derin tutulup travma öyküsünün de ayrıntılı sorgulanması gerektiği ile kontrol muayenelerin önemini bir kez daha hatırlatmayı amaçladık.

Anahtar Kelimeler: Dalak Laserasyonu, Travma, Senkop

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Recieved : 26.03.2024
Accepted : 16.04.2024

INTRODUCTION

The spleen is one of the most commonly injured organs in blunt trauma. Typical symptoms of splenic injury include pain in the left upper abdomen, peritoneal inflammation and shock due to blood loss. Kehr's sign is observed in approximately 1 out of every 5 cases (1,2). The Kehrsign is a classic example of radiating pain, where problems with the diaphragm or spleen cause pain in the left shoulder. Irritation or damage to the diaphragm stimulates the phrenic nerve, causing pain above the clavicle, in the left shoulder or clavicle region (2). USG is the imaging method of first choice in the emergency department because it is portable, rapid, reproducible, noninvasive and low-cost (3,4). In addition to surgery, conservative treatment is also used in selected patients.

CASE REPORT

A 68-year-old man was admitted to the emergency department with the complaint of fainting after feeling dizzy at the exit of a mosque. He did not remember how he fell and had no chest pain or shortness of breath before the incident, only dizziness. The patient described complete syncope and had head trauma in the occipital region. There was no open wound or hematoma and only soft tissue tenderness. The patient had a history of hypertension, chronic renal failure and chronic obstructive pulmonary disease. At the time of admission, blood pressure was 126/68 mmHg, pulse rate 86/min, SpO2 97%, temperature 36.4 °C, fingertip blood glucose 98 mg/dL and he had no active complaints at the time of admission. On physical examination, GCS was 15, oriented and cooperative, and neurologic and other system examinations were normal. Bilateral pulses were equal and palpated clearly. Abdominal examination revealed no defense, rebound and tenderness. Rectal examination was characterized by colic fecal smearing.

ECG was ordered in addition to laboratory tests. There was no acute ischemic change on ECG. Laboratory tests revealed pH:7.38 lactate:1.8 hemoglobin:12. Other laboratory values including cardiac markers were within normal limits. Bedside USG of the aorta showed no evidence of dissection.

There was no acute pathologic finding on brain CT. The patient, whose vitals were stable during follow-up, stated that he felt dizzy again when he was lifted from the stretcher during the control examination. His vitals were checked and blood pressure was 70/40 mmHg. Crystalloid fluid replacement was started. The patient reported a new onset of abdominal pain. When the anamnesis was deepened, he stated that he hit his left side on the pavement while falling, but he did not mention it at the time of the first anamnesis because he was not in pain. Control hemogram biochemistry tests and abdominal USG were ordered from the patient who had tenderness in the left upper quadrant of the abdomen. Abdominal USG showed a heterogeneous hyperechogenous area in the splenic parenchyma. Contrast-enhanced abdominal CT showed perihepatic perisplenic and abdominal free fluid. The spleen was heterogeneously contrast enhanced. Perisplenic hemorrhage area was observed (Figure).

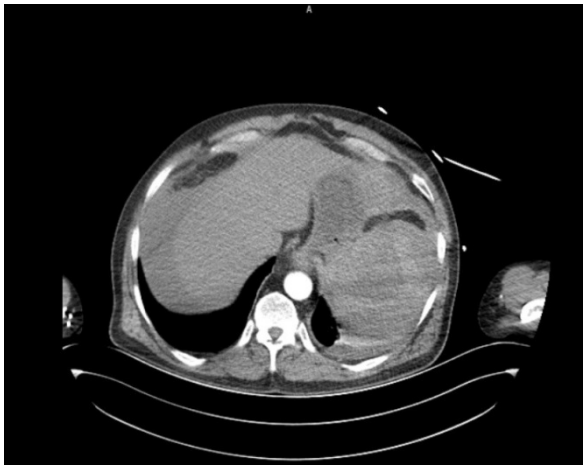

Figure: Contrast-enhanced abdominal CT

The patient was consulted to general surgery with a diagnosis of splenic laceration. Vasopressor therapy was initiated because of persistent hypotension despite appropriate fluid replacement. Erythrocyte suspension replacement was planned. The patient was taken into emergency operation by general surgery and splenectomy was performed. The patient developed signs of multiorgan failure during intensive care unit follow-up and died on the 5th post-op day.

DISCUSSION

A spleen injury is a potentially fatal injury if left undetected or untreated. Injuries are divided into traumatic and non-traumatic injuries. Traumatic injuries are more common and their etiology mostly involves motor vehicle accidents or direct blows to the abdomen, which commonly occur in sports. Non-traumatic causes include neoplasm, infectious, inflammatory disease, drug and medical treatment, mechanical causes and idiopathic condition (2,3). Patients may be asymptomatic or present with abdominal pain, nausea, shoulder pain and shock. Our patient was initially asymptomatic, but during follow-up in the emergency department, first abdominal pain and then hypovolemic shock developed. Ultrasonography and CT are commonly used imaging modalities for diagnosis. Although ultrasound is a highly reliable method in diagnosing the presence of intra-abdominal free fluid, its sensitivity in demonstrating acute injury to the spleen may decrease to 72-89% (4). CT is a

highly reliable method in the diagnosis of splenic injuries and has an accuracy rate of 93%. In addition, CT has the ability to differentiate patients without any damage to the spleen with 100% accuracy (5). Ultrasound may help the diagnosis of splenic diseases by showing findings such as decreased echogenicity, enlargement, fluid accumulation under and around the capsule and free fluid in the abdominal cavity (6). In our patient, USG of the whole abdomen and then abdominal CT with iv contrast were ordered. The treatment plan is determined depending on the hemodynamic stability of the patient. Since our patient was hemodynamically unstable, splenectomy was performed. If the patient's blood pressure and circulation are unstable, intravenous fluid therapy should be administered by opening two wide vascular accesses in the emergency room until the patient is taken to surgery and blood transfusion should be performed if possible.

CONCLUSION

In conclusion, in this case report, we wanted to emphasize that in a patient presenting with syncope, in addition to non-traumatic causes, the anamnesis should be kept deep and the history of trauma should be questioned in detail. We also wanted to draw attention to the fact that it is very important to follow the patient in the emergency department for a sufficient period of time and to perform consecutive control examinations during follow-up.

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