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Case report / Olgu sunumu

DYSPNEA ASSOCIATED WITH HIATAL HERNIA

Dispneye eşlik eden Hiatal herni olgusu

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ABSTRACT

Hiatal herniation of abdominal contents into thoracic cavity is a rare cause of dyspnea. We present in this case report an 81-year-old woman with follicular lymphoma who presented to our emergency department with dyspnea. Physical examination, oxygen saturation on room air, and ECG were normal. Chest X-Ray showed gastric and colonic gas behind the silhouette of the heart. Thorax CT revealed a wide defect in diaphragma with herniation of the stomach and transverse colon.. Thoracic surgery department did not consider any urgent intervention and recommended outpatient control. Dyspnea regressed spontaneously with supplemental nasal oxygen. The patient was discharged after symptoms were completely resolved.

Key words: Hiatal hernia, dyspnea, emergency.

ÖZET

Abdominal içeriklerin torakal kaviteye herniasyonu dispnenin nadir bir nedenidir. Bu yazıda, foliküler lenfoma hastalığı olan ve acil servisimize dispne ile başvuran 81 yaşındaki bir kadın hastayı sunuyoruz. Fizik muayene, oda havsında oksijen satürasyonu ve EKG normal idi. Göğüs filmi, kalp gölgesinin arkasında gastrik ve kolonik gaz gösteriyordu. Torakal BT diafragmada geniş bir defekt ile birlikte mide ve transvers kolonun herniasyonunu gösterdi. Göğüs cerrahisi bölümü acil girişim düşünmedi ve ayaktan kontrol önerdi. Dispne nazal oksijen tedavisi ile spontan geriledi. Semptomlar tamamen geriledikten sonra hasta taburcu edildi.

Anahtar Kelimeler: Hiatal herni, dispne, acil.

Case

An 81-year-old woman presented to our emergency department with dyspnea for 2 hours. She had no chest pain, diaphoresis, syncope, back or arm pain. She had follicular lymphoma of grade 3 stage IIIS diagnosed in April 2010. She had no history of heart failure nor chronic obstructive pulmonary disease. Her vital signs were as follows: blood pressure was 122/63 mmHg, pulse rate was 96 bpm, respiratory rate was 20 breaths/min, body temperature was 36°C, and sPO_2 was 96%. Her focused physical examination revealed no rales, wheezing, ronchi. There was no murmur, S3 or S4 in cardiac auscultation. Abdominal examination showed no ascites. There was no peripheral edema. ECG showed normal sinus rhythm (83 bpm). Arterial blood gas analysis without supplemental O_2 showed a pH of 7.42, pO_2: 60.4, pCO_2: 39.4, sO_2: 94.4%, and HCO_3: 25.6. Chest X-ray showed gastric and colonic gas behind the silhouette of the heart (Figure 1).

Thorax CT revealed a wide defect in diaphragma with herniation of the stomach and transverse colon. (Figure 2). Dyspnea regressed spontaneously with supplemental nasal oxygen. A thoracic surgery consultation was obtained for hiatal hernia. A 3 month-earlier thoracic CT of the patient also revealed hiatal hernia of the same abdominal contents. There were no signs of strangulation or obstruction. Thoracic surgery department considered the pathology an elective case and did not consider any urgent intervention

and recommended outpatient control. The patient was discharged after symptoms were completely resolved.

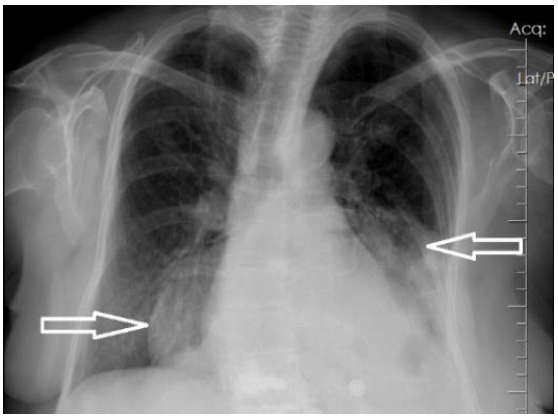

Figure 1: Chest X-ray showing gastric and colonic gas behind the cardiac silhouette (arrows).

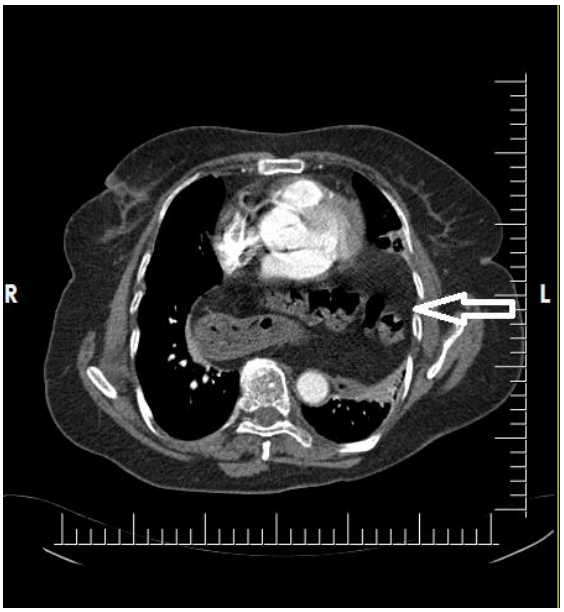

Figure 2: Mediastinal window of thorax CT of the patient showing gastric and colonic segments that herniated to thoracic cavity through a diaphragmatic defect (arrow).

DISCUSSION

Hiatal hernias most commonly lead to symptoms such as heartburn, belching, dysphagia, chest pain, nausea, vomiting, and cough (1). It may occasionally lead to gastric volvulus, strangulation and perforation (2). Hiatal hernia is a rare presentation and only a few studies have been reported as a cause of dyspnea (3,4). Hiatal hernia is usually encountered as an air-fluid level behind heart sihouette in plain chest films. When symptomatic, hiatal hernias are surgically corrected on an elective basis whereas an urgent surgey is required in cases with emergent complications such as obstruction, strangulation, perforation. Literature data on the role of surgery in patients with hiatal hernia-induced dyspnea is rare. In a study with 30 patients with hiatal hernia who underwent laparoscopic hernia repair, the operation did not improve respiratory function tests whereas it improved respiratory symptoms. Elective surgery is also recommended for asymptomatic cases since important complications may appear without precursor symptoms (5). As our patient improved spontaneously without any intervention, we could speculate that colonic and gastric segments descended back to the abdominal cavity with the effect of gravity and dyspnea resolved.

In conclusion, hiatal hernias, although a rare cause of dyspnea, should be remembered in patients presenting with dyspnea that cannot be explained otherwise. A chest X-ray is a useful tool to diagnose this entity. In equivocal cases, a chest CT is useful.

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