Hiatal Hernia From Misdiagnosis to Diagnosis

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Abstract- Complications of hiatal hernia are potentially lethal, and surgical intervention is necessary. This matter is more important in cases that have ambiguous symptoms and are diagnosed with a delay. Such patients may experience life-threatening course and events. Accordingly, in this report, a 23-year-old male patient with unusual findings is presented. A 23-year-old male patient with acute dyspnea and fever was admitted in infectious disease ward with diagnosis of empyema according to chest radiography and CT-scan findings (Figures 1 and 2). On physical examinations the right lung sounds were normal, and the left lung sounds could not be heard. Then a gastrography was performed because of suspicion to hiatal hernia based on physical examination findings showing the presence of stomach in the thorax (Figure 3). In the surgery, the stomach and the transverse colon were released and reputed in the abdomen (Figure 4). The diaphragm was primarily repaired due to small defect, and the patient was discharged after 4-5 days with good general conditions. This case had a learning note that in the case of acute dyspnea with a positive history of stab wound to the chest, hiatal hernia should be considered as an important diagnosis and in these cases performing a gastrography would help physicians to make true and certain diagnosis and therapeutic decision.

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Keywords: Hiatal hernia; Stab wound; Dyspnea

Introduction

A hiatal hernia occurs when a portion of the stomach prolapses through the diaphragmatic esophageal hiatus (1). The frequency of hiatal hernia increases with age, from 10% in patients younger than 40 years to 70% in patients older than 70 years (2). Most hiatal hernias are asymptomatic and are discovered incidentally. On rare occasions, a life-threatening complication such as gastric volvulus or strangulation may present acutely with sudden epigastric pain (3).

Paraesophageal hernias generally tend to enlarge with time, and sometimes the entire stomach is found in the chest (4). The risk of these hernias becoming incarcerated, leading to strangulation or perforation is approximately 5%. This complication is potentially lethal, and surgical intervention is necessary (5). This matter is more important in cases that have ambiguous symptoms and are diagnosed with a delay. Such patients may experience life-threatening course and events. Accordingly, in this report, a 23-year-old male patient with unusual findings is presented.

Case Report

A 23-year-old male patient with acute dyspnea and fever was admitted in infectious disease ward with diagnosis of empyema according to chest radiography and CT-Scan findings (Figures 1,2). Hence these physicians decided to insert a chest tube for the patient. The patient was heavy smoker and opium user. The blood pressure was 120/70 mmHg, the heart rate was 100 per minute, and the respiratory rate was 22 per minute. The oral body temperature was 38.5 centigrade degrees. The laboratory tests showed leukocytosis. On physical examinations, the patient had a scar of stab wound on the four-five left intercostal space on the chest since three years ago. The right lung sounds were normal, and the left lung sound could not be heard. Then the gastrography was performed showing the presence of stomach in the thorax (Figure 3).

In the surgery, the stomach and the transverse colon were released and reputed in the abdomen (Figure 4). The diaphragm was primarily repaired due to small

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defect, and the patient was discharged after 4-5 days with good general conditions.

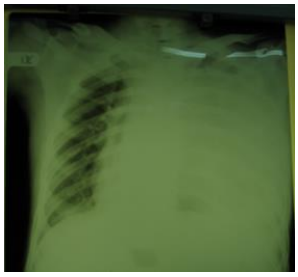

Figure 1. Gastrogarphy of the patient

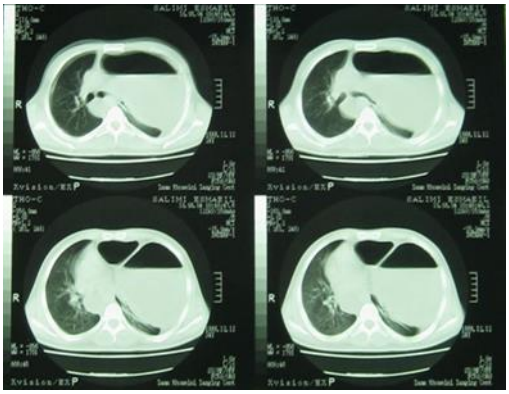

Figure 2. CXR of the patient

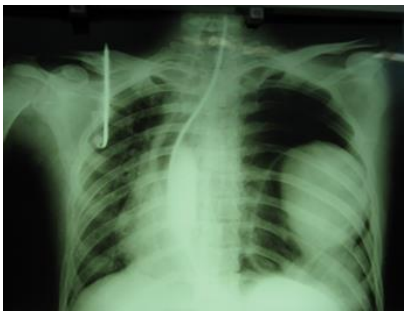

Figure 3. CT scan of the patient

Figure 4. Site of the surgery

Discussion

Hiatal hernias are relatively common and by themselves do not cause symptoms. For this reason, most people with hiatal hernias are asymptomatic. Hiatal hernias may predispose to reflux or worsen existing reflux in a minority of individuals. Physicians should resist the temptation to label hiatal hernia as a disease (6,7).

No clear correlation exists between the size of a hiatal hernia and the severity of the symptoms. A very large hiatal hernia may be present with no symptoms at all. However, a small defect in the presented case in this study resulted in significant symptoms. A patient with a large hiatal hernia may experience vague intermittent chest discomfort or pain (8). Surgery is necessary for a minority of patients with complications of GERD despite aggressive treatment with proton pump inhibitors (7). Because only a minority of patients with hiatal hernia have any problems, this represents a very small proportion of patients with sliding hernia; most patients with problems are managed medically (9). Another group of patients who are surgical candidates is those with pulmonary complications; particularly asthma, recurrent aspiration pneumonia, chronic cough, or hoarseness linked to reflux disease (10). The presented case in this study also had dyspnea as the main symptom that resulted in suspicion to empyema due to fever and CXR findings.

This report had a learning note that in the cases of acute dyspnea with a positive history of stab wound to the chest the hiatal hernias should be considered as an important diagnosis and in these cases performing a gastrography would help the physicians to make true and certain diagnosis and therapeutic decision.

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