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Chest trauma: suicide by sharp force

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ABSTRACT

Introduction: In this article, we report a case of penetrating chest trauma as a suicide attempt.

Case Report: A 40-year-old man complained of chest pain following a fall from a height (about three days ago). The patient refused to provide a complete history. After obtaining new and detailed patient's history from his father and reviewing his psychiatric file, it was determined that he performed trauma with the intention of committing suicide to his chest with a metal wire. There were two points of injury in his left hemithorax with infected crusts. Radiologic evaluation showed two foreign bodies in left hemithorax and hemothorax. Patient underwent surgery and finally was transferred to psychiatry unit.

Conclusion: It is important to get a detailed history of patients, especially those with mental disabilities and psychiatric disorders. Careful examination of these patients is recommended, even with the initial examinations.

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Introduction

In the current world, trauma is one of the leading cause of death, hospitalization, and disability in all age groups (1). Chest trauma alone accounts for 45% of all trauma-related deaths. A new analytic study showed that many chest trauma related death occurred before patients arrived to emergency department (2). Although chest trauma is fetal, emergent surgery is needed only in 15% of cases. And conservative treatment might be enough in many cases. A survey of 600 trauma-related deaths revealed that more than half of them are preventable with a prompt and early and appropriate diagnosis and interventions (3). The patient's medical record and documentation is important in patients evaluation and diagnostic and therapeutic measures and is the first and most crucial source of information. The accurate method of completing records has a significant impact on reducing medical error and leading to proper diagnosis and on time treatment of patients. Documenting medical records is an important legal and professional need because it can be used for research and quality assessment in addition to facilitating the exchange of patient information for medical team members (4).

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History taking is not easily possible in some cases in emergency department, because of emergency room overcrowding or lack of time. On the other hand some patients do not cooperate with their physician such as psychiatric patients or children (5). In this study, we report a case of penetrating chest trauma as a suicide attempt.

Case Report

A 40-year-old man has been referred to our trauma center, complained from lower chest pain following a fall from a height (about three days ago). At the time of admission, the patient was triaged to the orthopedic fasting room as a Level 4 of patients based on stable vital signs and history of previous trauma. At first the patient entered the examination room without accompaniment. In initial evaluation he told that he fall from the scaffold (about two meters high) three days earlier. In a quick and brief initial examination, the patient complained of the left lower hemithorax pain and tenderness. There were two points of injury in his left hemithorax with infected crusts. Other examinations showed no pathological evidence, and the patient did not mention a history of previous illness and drug use. A plain chest radiographs (posterior/anterior and lateral views) was obtained from patient (figure-1).

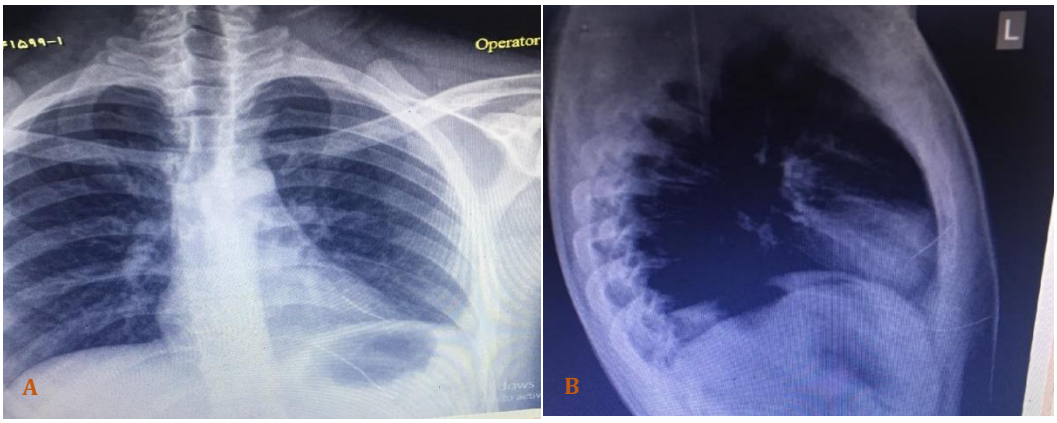

Figure 1: A-PA view of chest (Red arrow: Two foreign objects with possibly metallic density, left side blunt costophrenic angle), B- lateral view of chest

Radiographs showed evidence of left side blunt costophrenic angle and two foreign bodies in the left hemithorax. Surgical consultation was performed for the patient. The surgeon discharged the patient by telephone after seeing radiographs and referred him to an outpatient surgery clinic. According to the patient's condition, the emergency medicine specialist decided to admit and perform a chest CT scan for patient (Figure 2).

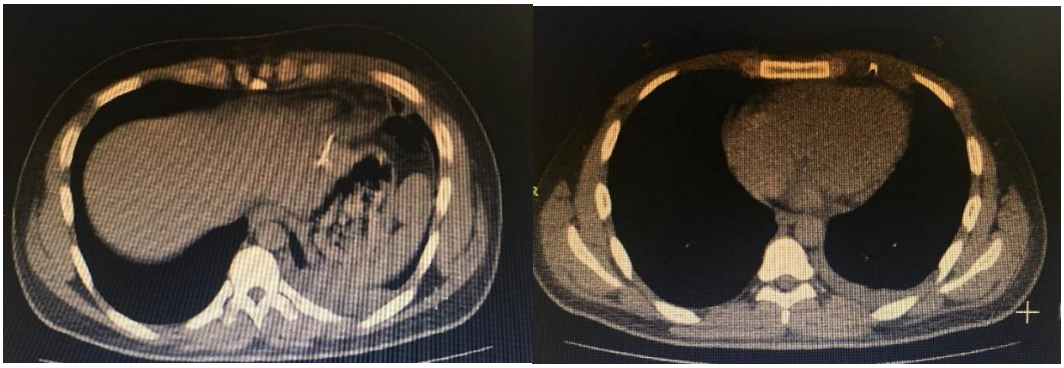

Figure 2: Axial view of non-contrast chest CT scan: hemothorax and foreign bodies.

Based on the new finding obtained from the radiologic examination, the patient asked for a detailed history, but he refused to provide a complete history. After obtaining new and detailed patient's history from his father and reviewing his psychiatric file, it was determined that he performed trauma with the intention of committing suicide to his

chest with a metal wire. So, patient was examined carefully again, but there were no evidence of trauma in other part of his body. Psychiatric counseling was asked for the patient regarding the likelihood of suicide or abuse. The surgeon was also consulted again. Finally, the patient underwent emergency thoracotomy surgery and chest tube placement. The patient underwent Tetanus vaccination and antibiotic therapy and immediately was transferred to the operating room. After performing anterior thoracotomy on the left hemithorax, two foreign bodies (wire and needle) were removed that damaged the lung parenchyma. Then, chest tube was inserted and the patient was transferred to the surgical ward. In the surgical ward, psychiatric consult was performed and according to the patient's condition and suicide attempt and pervious psychiatric history, the patient was transferred to the psychiatric ward after completion of treatment in the surgical unit.

Discussion

Schizophrenia is one of the most common psychiatric disorders associated with thought, perception, emotion, movement, and behavior disorders. This chronic illness is debilitating and faces many challenges for the patient and physician (3). In many cases, it is difficult to identify the initial complaint and the cause of the patient's referral to the emergency department. Our patient initially stated fall as the cause of injury, but due to the late referral and there was the possibility of suicide or abuse. Suicide was finally confirmed after the patient's psychiatric evaluation and counseling.

In the emergency department, quick and accurate history taking of patients is important, because in many cases the emergency room overcrowding and the refusal of the patient to mention their exact cause of referral increases the likelihood of medical error. An emergency medicine physician should have a broad vision while making the best decision for the patient as soon as possible. Because ultimately emergency medicine specialist is in charge for the patient and in many cases other specialists with prefer telephone counseling and discharging. Like our patient, who was initially discharged by the surgeon, and if this action was confirmed by emergency medicine specialist patient might encounter with complications and even death. Therefore, accurate consultation in the emergency department and improvement of the quality of documentation in the emergency department has paramount importance.

Conclusion

It is important to get a detailed history of patients, especially those with mental disabilities and psychiatric disorders. Careful examination of these patients is recommended, even with the initial examinations.

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