CASE REPORT

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Should Lateral Abdominal Radiography be Taken in Abdominal Pain?

Karın Ağrısında Lateral Abdominal Radyografi Çekilmeli mi?

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ABSTRACT

Abdominal pain is among the most common reasons for emergency room visits, with a rate of approximately 7 percent. Most of the time patient history taken from the patient or relatives, physical examination and laboratory findings are not enough to diagnose the patient and additional radiological imaging such as upright abdominal radiography or ultrasound is needed. Although the exact cause of patients' abdominal pain may not always be determined in the emergency room, life threatening conditions should always be excluded. It is always important to make a quick, early and correct diagnosis. In this case report, we have explained the diagnosis of an intra-abdominal foreign object with lateral radiography seen in a Syrian refugee who presented with abdominal pain to our emergency room.

Keywords: *Abdominal pain, intra-abdominal foreign object, lateral radiography, refugee patient*

ÖZET

Karın ağrısı, yaklaşık %7'lik bir oranla acil servis başvurularının en sık nedenleri arasında yer almaktadır. Çoğu zaman hasta veya yakınlarından alınan öykü, fizik muayene ve laboratuvar bulguları hastaya tanı koymak için yeterli olmamakta ve dik karın grafisi veya ultrason gibi ek radyolojik görüntülemelere ihtiyaç duyulmaktadır. Hastaların karın ağrısının kesin nedeni acil serviste her zaman belirlenemeyebilse de, hayatı tehdit eden durumlar her zaman dışlanmalıdır. Hızlı, erken ve doğru tanı koymak her zaman önemlidir. Bu olgu sunumunda, acil servisimize karın ağrısı ile başvuran Suriyeli bir mültecide görülen karın içi yabancı cisim tanısını lateral radyografi ile açıkladık.

Anahtar Kelimeler: *Karın ağrısı, intraabdominal yabancı cisim, mülteci hasta, yan grafi*

INTRODUCTION

Abdominal pain is among the most common reasons for emergency room visits, with a rate of approximately 7 percent. Age, gender, ethnicity, sexuality, etc. can affect clinical features and incidences. Most of the time, patient history taken from the patient or relatives, physical examination and laboratory findings are not enough to diagnose the patient and additional radiological imaging such as upright abdominal radiography or ultrasound is needed (1). Although the exact cause of patients' abdominal pain may not always be determined in the emergency room, life threatening conditions should always be excluded (2). It is always important to make a quick, early and correct diagnosis. For these reasons, the clinician should always obtain a thorough and adequate history, perform detailed physical examination and order appropriate laboratory tests and radiological imaging. The most important thing is to have clinical suspicion of life threatening conditions (3). It should be kept in mind that insufficient and inaccurately obtained medical history due to an increase of refugees/asylum seekers (due to war, etc.) and consequent language barriers can cause a delay in diagnosis and treatment, and even cause serious morbidity and/or mortality. In this case report, we have explained the diagnosis of an intra-abdominal foreign object with lateral radiography seen in a Syrian refugee who presented with abdominal pain to our emergency room.

CASE REPORT

Our patient was a 19 year old, male, Syrian refugee who was referred from our triage to our rapid examination area

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due to abdominal pain. Due to the lack of a 24 hour on site translator at our hospital, the patient's medical history was obtained from the patient's friend. According to the patient's medical history, the patient had abdominal pain, nausea, vomiting and fatigue for about 3 days and was given intravenous fluids and discharged with a probiotic prescription in a level 1 hospital but his symptoms did not resolve. The patient has no known pre-existing health conditions, no regularly used medications, and has no history of surgery/operations. The patient works in a furniture factory where it is often cold, he has had repeated episodes of abdominal pain every 3 months that would subside with a hot water bag placed on his abdomen but this time his pain lasted longer than usual. the patient Consent was obtained and he gave signed consent

The patient's vitals were as follows; blood pressure: 125/78 mmHG, pulse: 70 beats/minute, respiratory rate: 14/minute, and body temperature: 36.8°C. There was no abnormality in the vitals.

The patient's physical exam findings were as follows; the patient's general condition was good, the patient was conscious, oriented and cooperative, his Glascow Coma Score was 15, there were no lateralized motor deficits, no abnormal findings were found in his head-neck, respiratory system and cardiovascular system examinations. Besides abdominal tenderness at the umbilicus and mid-right area of the sternum the rest of the abdominal findings were normal. There was no incision or scar.

The patient's laboratory test results were as follows; WBC: 13,000 mm^3, hemoglobin: 14.8 g/dL, platelet Count: 285,000 mm^3, CRP: 13 mg/L, AST: 47 U/L, ALT: 51 U/L, glucose: 107 mg/dL, creatinine: 1.01 mg/dL. Complete urinanlysis showed no abnormalities. Again, there were no pathological laboratory or urinalysis findings.

Upon the patient's vomiting, upright abdominal radiography was taken to rule out possible perforation, ileus, etc., the patient's X-ray showed his belt buckle and pant zipper and when looked at carefully, a small opacity was also seen (shown in figure 1 with an arrow). A lateral radiograph was immediately taken. In the lateral X-ray, a 3 cm long foreign object consistent with metal opacity was detected (shown in figure 2). When the upright abdominal radiograph was shown to the patient and his relatives, they reported that 3-4 days ago the patient and his friends were playing around with a nail gun at the furniture factory that the patient is employed at but the patient reported never feeling a foreign object entering his abdomen. The patient hadn't reported the incident to us when the initial history was taken. When the patient was reexamined closely, milimetric redness was detected in the skin between the umbilicus and mid-right area of the xiphoid process of the sternum which could be the potential entry site. The patient was consulted to general surgery and was administered intravenous antibiotics and an intramuscular tetanus shot. The patient was operated on by general surgery, the foreign metal object was removed and the patient was discharged three days after his operation.

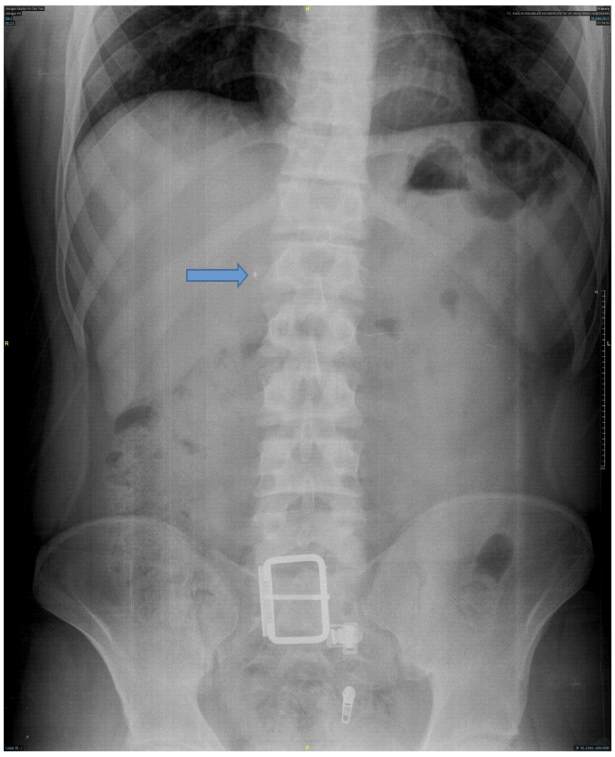


Figure 1. Upright abdominal radiograph, the end of the arrow points to the opacity from the foreign object seen when examined closely.

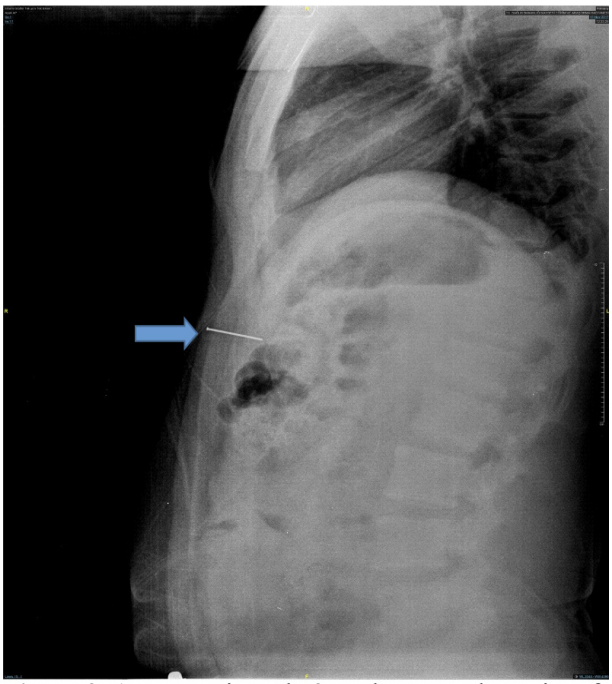


Figure 2. An approximately 3 cm long metal opacity of a foreign object is seen

DISCUSSION

Unfortunately, due to wars, famine, diseases etc. millions of people have to leave their culture and homes behind. For example, due to the war between Ukraine and Russia approximately 2 million people have had to take shelter in different countries as refugees (4). These refugees have to live in different countries with either inadequate or nonexistent health insurance, inadequate nourishment and hygeine and therefore frequently visit emergency rooms. It may take a long time for asylum seekers/refugees to adapt/ learn the language in the regions they go to (5). This makes it difficult to obtain an adequate medical history, as in our case, and causes delays in diagnosis and treatment.

Conclusion

In conclusion. refugees who cannot speak the same language adequately should be seen with an interpreter if available, should be subjected to a more detailed physical examination, observed for a longer period of time, and in cases of suspicion testing and imaging should not be avoided. If this patient's upright abdominal X-ray hadn't raised suspicion and a lateral radiograph wasn't ordered it could have resulted in poor outcomes. In fact, it may be useful to request a lateral radiograph in addition to upright abdominal radiograph in patients who routinely present to the emergency department with abdominal pain. Of course, detailed studies with a large number of cases are needed.

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Conflict of Interest: The authors declare no conflict of interest in this study.
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