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Internal medicine flashcard

# A young woman with left lower chest pain

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## 1. Case presentation

A 34-years old woman presented to the emergency department with complaints of acute-onset and progressive left upper quadrant abdominal and left lower chest pain, nausea, and fever since about 4 days ago; she has had a history of blunt abdominal trauma 15 years ago. On physical examination, she had fever, tachycardia, tachypnea, and left upper quadrant abdominal tenderness. Plain chest radiography showed an air-fluid level behind the heart apex and a blunted left side costophrenic angle (See Fig. 1 Panel A; black arrow). Thoracentesis revealed a bloody and exudative pleural fluid (LDH: 7130 IU; Protein: 5.3 g/dL).

## 2. What is the diagnosis?

### 2.1. Diagnosis

#### 2.1.1. Diaphragmatic hernia

Contrast-enhanced computed tomography (CT) of the chest showed herniation of the stomach through the left hemidiaphragm into the chest cage (Fig. 1 Panels B and C; asterisks). The patient undergone thoracotomy that confirmed gastric herniation and strangulation, and gangrene of fundus; thus, partial gastrectomy was done. Chest pain and bloody pleural effusion could lead to other differential diagnosis but the

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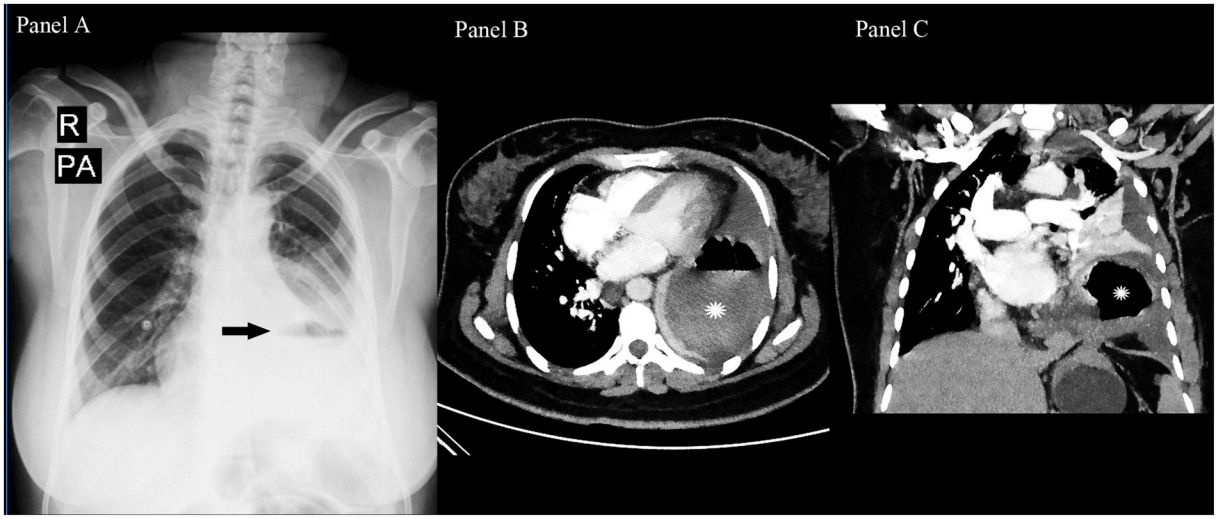


**Fig. 1.** Panel A: Plain chest radiograph showing an air-fluid level in left hemithorax (black arrow). Panel B: CT scan study (axial view reconstruction) showing the herniated stomach into the chest cavity (white asterisks). Panel C: CT scan study (coronal view reconstruction) demonstrating discontinuation of left hemidiaphragm and herniation of the stomach into the chest cavity (white asterisks).

chest CT scan was very helpful to build up the diagnosis.

Diaphragmatic hernia is a rare but potential life-threatening condition that poses a diagnostic challenge to the physicians [1]. It may have a delayed presentation following traumatic abdominal injury, ranging from hours to years [2]. Manifestations usually occur due to strangulation and incarceration of herniated abdominal viscera, or respiratory compromise caused by reduced intra-thoracic volume [1]. CT is the preferred imaging modality for diagnosing this condition [3].

## Declaration of interest

None.

## Conflict of interests

None.

## Acknowledgment

None declared.

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