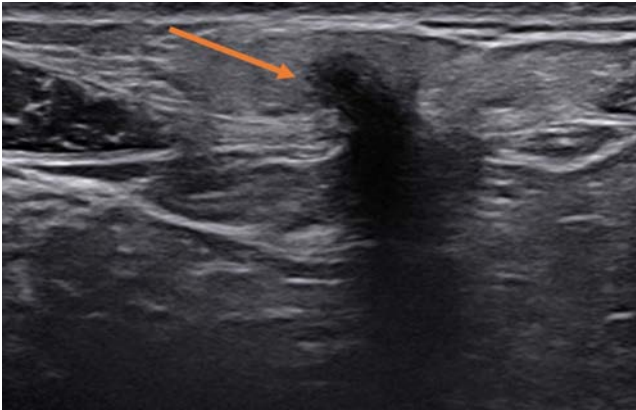


A small lump in the abdomen

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A 20-year-old man presented to the emergency department with a small painful swelling located in the midline of the epigastric region. His medical history included asthma and extramucosal pyloromyotomy for hypertrophic pyloric stenosis when he was a baby. His vital signs were normal. Abdominal ultrasound (US) showed a small hypoechoic formation located in the subcutaneous adipose tissue that penetrated into the abdominal cavity through an orifice of about 7 mm in the linea alba.

Question

Given the patient's history and ultrasound image, which is the correct diagnosis?

- Umbilical vein recanalization
- Falciform ligament thrombosis
- Herniation of the round ligament of the liver through the anterior abdominal wall with hyperemia in surrounding subcutaneous adipose tissue
- Arteriovenous malformation of the anterior abdominal wall

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Informed consent: the patient provided consent for the access to medical records at the time of admission.

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Answer

Herniation of the round ligament of the liver through the anterior abdominal wall with hyperemia in surrounding subcutaneous adipose tissue is the correct answer, as confirmed by an abdominal contrast enhanced computed tomography scan (Figure 1 A, B). The patient was promptly discharged from hospital with symptomatic therapy alone (Ibuprofen, 600 mg daily for six days), avoiding surgery. Complete pain relief was achieved within few days and the patient is still doing well.

Abdominal herniation is a protrusion of part of its content from the abdominal cavity through a normal or abnormal aperture or from wall weakness.¹ Diagnosis is usually made at physical examination; however, clinical diagnosis can be difficult, especially in patients with pain. In these cases, abdominal imaging may be the first clue to correct diagnosis.^{2,3} Abdominal US and CT scan can define hernial content, distinguish it from other abdominal wall masses (such as hematomas, abscesses, sebaceous cysts, haemangiomas, arteriovenous malformations, and other soft tissue tumours), and detect signs of complications within the hernia sac, *i.e.*, incarceration and strangulation, which require an urgent surgical evaluation.^{2,4} Epigastric hernias occur on the linea alba between the xiphoid process and umbilicus.² These hernias contain the fal-ciform ligament in only 2.4% of cases.⁵ Considering that abdominal wall hernias represent the second most common indication for surgery after acute appendicitis in Western countries,⁶ a prompt imaging recognition of this rare epigastric hernia may allow a conservative management. For these reasons emergency physicians should know this unusual condition in order to avoid unnecessary surgical treatment.

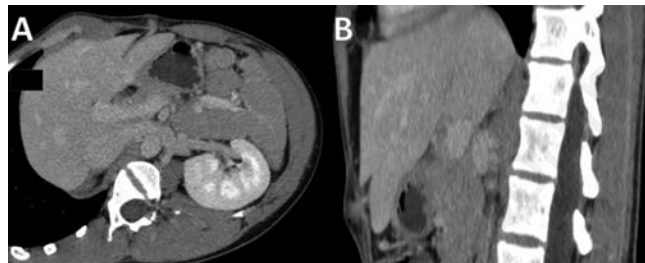


Figure 1. Oblique axial (A) and oblique sagittal (B) abdominal contrast enhanced computed tomography scan.

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