

Letters to the Editor

Incarcerated Spigelian hernia: Diagnosis by computed tomography

Key words: Spigelian hernia. CT. Hernioplasty.

Dear Editor,

We present the case report of a fifty-eight-year-old female hypertensive and obese, with no history of previous abdominal surgery was admitted in the emergency department of our hospital with abdominal pain in right flank and lower quadrant with nausea of one month's duration that had worsened in the past 48 hours. On examination, we found acceptable condition and abdomen soft, but very painful to palpation in the right flank along with signs of peritoneal irritation where a mass was palpable of 4 x 4 cm. A general analysis revealed neutrophilic leukocytosis without other pathological data. Chest and abdomen radiographs were normal. A computed tomography (CT) scan confirmed the ventral hernia with fat in the right Spiegel line (Fig. 1). The patient underwent surgery for incarcerated Spigelian hernia containing viable omentum. We performed reduction of the hernia content, closing the bag and hernioplasty with goretex umbrella and polypropylene flat mesh below the external oblique muscle fascia. The outcome was favourable and the patient was discharged at the fourth day.

Discussion

Spigelian hernia was first described in 1764 by Klinkosch although it was Spiegel who described the semilunar line (1). It represents 0.1-2% of abdominal wall hernias (2), and although it can occur at any age, is more common in women aged between 50 and 60. The clinical spectrum ranges from asymptomatic hernia until

complicated pictures with incarceration or strangulation, an event that occurs in 20% of cases and that causes intense pain due to the small size of the foramen hernia (3). Diagnosis can be difficult during standard clinical examination, even in the episodes of incarceration in which abdominal mass with peritoneal irritation can be observed. The differential diagnosis should be established with abdominal wall tumors, colon tumors, ovarian cysts (4) and in cases of incarceration with diverticulitis and appendicitis (5). The performance of CT, MRI or abdominal ultrasound may be useful for the diagnosis (6). However, in our case, the imaging that was performed first was an ultrasound that reported appendiceal inflammatory process, which was not consistent with the one month history of abdominal pain of the patient. The performance of CT scan of the abdomen did determine the correct diagnosis. The treatment of incarcerated Spigelian hernia should be surgically. To date, no scientific evidences exist whether the laparoscopic approach is better than open surgery. The lack of studies is caused by the low incidence of this type of hernia defect and lack of experience in the minimally invasive approach. However, the laparoscopy procedure is safe and effective even in emergency

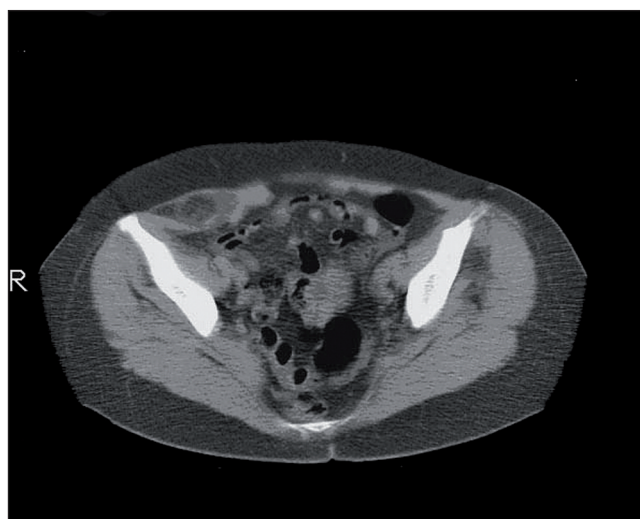


Fig. 1. Right Spigelian hernia with incarcerated fat inside.

surgical situations (7). In our case, the selected surgical option was the open surgery due to our limited experience in emergency laparoscopic repair and our high skills in the open technique.

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References

1. Skandalakis PN, Zoras O, Skandalakis JE, Mirilas P. Spigelian hernia: surgical anatomy, embryology, and technique of repair. *Am Surg* 2006;72:971-2.
2. Dabbas N, Adams K, Pearson K, Royle GT. Frequency of abdominal wall hernias: is classical teaching out of date? *JRSM Short Rep* 2011;2:2-5.
3. Nagarsheth KH, Nickloes T, Mancini G, Solla JA. Laparoscopic repair of incidentally found Spigelian Hernia. *JLS* 2011;15:81-5.
4. Feliu X, Carbonell F. Hernias de la línea alba y anteriores. En: Parrilla P, Landa JL, editores. *Cirugía AEC 2ª ed.* Madrid: Medicapanamericana; 2010. p. 225-31.
5. Sinha S, Pushparajasekaran A, Borgstein R, Stoker DL. Spigelian hernia mimicking appendicular mass. *Intern Emerg Med* 2010;5:77-88.
6. Zeina AR, Mahamid A, Sakran N, Troitsa A. Computed tomographic diagnosis of incarcerated Meckel’s diverticulum in a patient with bilateral Spigelian hernia. *J Gastrointestinal Surg* 2012;16:447-9.
7. Skouras C, Purkayastha S, Jiao L, Tekkis P, Darzi A, Zacharakis E. Laparoscopic management of Spigelian hernias. *Surg Laparosc Endosc Percutan Tech* 2011;21:76-81.