

Incarcerated Spigelian Hernia: An Unusual Cause Of Acute Right Iliac Fossa Pain: A Case Study And Literature Review

A Bhalla, H Amin, D Parvathareddy, V Bhalla

Citation

A Bhalla, H Amin, D Parvathareddy, V Bhalla. *Incarcerated Spigelian Hernia: An Unusual Cause Of Acute Right Iliac Fossa Pain: A Case Study And Literature Review*. The Internet Journal of Surgery. 2006 Volume 12 Number 1.

Abstract

Spigelian Hernias are rare. We present a case of a 57 year old gentleman who presented acutely with an incarcerated spigelian hernia and review the subsequent options for successful treatment.

CASE REPORT

A 57-year-old gentleman attended our accident and emergency department one evening with a two day history of abdominal pain. Upon questioning he described the pain as being sharp in nature, and confined to the right iliac fossa.

The pain was first noted after a day of hard labour in the garden. He was unable to pinpoint what he was doing when the pain started, occasionally he felt nauseous but had not vomited. There were no other associated symptoms.

His past medical history was unremarkable, apart from a recent diagnosis of Barret's oesophagus. His medication on admission included Lansoprazole 30mg which he took daily.

On examination, he was well, but did complain of right iliac fossa pain. This was exacerbated by coughing and taking deep breaths. He was haemodynamically stable and afebrile. Both the respiratory and cardiovascular examinations were normal. Abdominal examination revealed mild tenderness, located to the right lower quadrant.

The patient was able to point to a single spot some 4cm below and lateral to the umbilicus on the right side as his cause of pain. There were no palpable masses and digital rectal examination was normal. Routine blood tests were all within normal limits.

A tentative diagnosis of a muscular strain was made with appendicitis and spigelian hernia also on the list of differentials. It was decided to admit the patient overnight for pain control and re-review in the morning with a view for further investigations.

The following day it became apparent that the patient's

symptoms had worsened. The pain was now constant and had increased in intensity. He was pyrexial with a temperature of 38°C and repeated blood tests noted a mild leukocytosis. It was decided that the patient should undergo a diagnostic laparoscopy with a view to proceed to an appendectomy if required.

The operative findings noted that the transverse colon was stuck up against the abdominal wall within the region of the right iliac fossa. A second port was introduced in the left iliac fossa and the bowel freed from the abdominal wall. It was noted that the fat attached to the transverse colon was gangrenous but the bowel itself was perfectly healthy. An open approach was used to resect the offending omentum via a right sided transverse incision over the site of the defect. A very small defect was noted just lateral to the rectus muscles. The abdominal wall was closed using two 1.0 looped polydioxanone sutures (PDS) in the traditional manner (one at each wound angle, meeting in the middle), incorporating the defect. Metal clips were placed to close the skin.

Post operatively, the patient made a good recovery; however, his discharge was delayed by an infection around the medial edge of the incision site. This was treated with a 5 day course of oral Flucloxacillin.

Histology noted that the specimen sent showed sections of adipose tissue showing fat necrosis and intestinal haemorrhage. No evidence of malignancy was noted.

DISCUSSION

Spigelian hernia (SH) account for up to 0.2% of all abdominal wall hernias. They usually present between 50-60 years of age, affecting both sides and sexes equally⁽¹⁾. With

incarceration rates of 17%, acute presentation in 10% and the lack of consistent physical examination findings in 36% of patients, physicians need to include SH in their differential diagnoses₍₂₎.

The diagnosis of SH presents greater difficulty than its treatment. The commonest presentation is that of a painful lump, lateral to the rectus muscle, below the level of the umbilicus. Large, easily palpable SH are not a diagnostic problem. It is the small hernias and abdominal wall defects that are easily overlooked because they are often masked by subcutaneous fat and seemingly an intact aponeurosis. In the absence of a palpable sac or obvious defect, point tenderness along the linea semilunaris, associated with a tense abdominal wall, most strongly suggest the diagnosis.

Imaging techniques such as ultrasonography, computed tomography and magnetic resonance imaging are complementary and cannot replace a thorough history and physical examination₍₃₎.

The use of the laparoscope has simplified its diagnosis, clarified its localization and facilitated the subsequent repair_(4, 5). With the growing use of laparoscopy, more SH will be diagnosed at the time of other elective procedures.

Once diagnosed, SH can be repaired using both open and closed techniques. Traditional open repairs involve

transverse abdominal incisions, reduction of the sac and its contents followed by primary closure which can be augmented by placement of a mesh if needed. Laparoscopic repair involves placement of an intra-abdominal mesh and offers the advantage of reduced morbidity, shorter hospital stay, cosmetic and perhaps the lower recurrence rate₍₆₎.

CONCLUSION

Although rare, spigelian hernia should be included in the differential diagnosis for right iliac fossa pain. Diagnosis is made from the clinical presentation, aided by imaging if necessary. Treatment is surgical, with a variety of different techniques available.

References

1. Montes IS, Deysine M. Spigelian and other uncommon hernia repairs. *Surg Clin North Am* 2003;83:1235-53.
2. Larson DW, Farley DR. Spigelian hernia: repair and outcome of 81 patients. *World J Surg* 2002;26:1277-81.
3. Gupta P, Bhartia VK. Incidental spigelian hernia. *Indian J Surg* 2006;68:102-103.
4. Koksall N, Altinli E, Celik A, Oner I. Extraperitoneal laparoscopic approach to spigelian hernia combined with groin hernias. *Surg Laparosc Endosc Percut Tech* 2004;14:204-6.
5. Martell EG, Singh NN, Zagorski SM, Sawyer MA. Laparoscopic repair of a spigelian hernia; a case report and literature review. *JSLs* 2004;8:401.
6. Moreno-Egea A, Carrasco L, Girela E, Martin JG, Aguayo JL, Canteras M. Open versus laparoscopic repair of spigelian hernia: A prospective trial. *Arch Surg* 2002;137:1266-8.

Author Information

Ashish Bhalla, MRCS

Dept. General Surgery, Watford General Hospital

Hemisha Amin, MBBS

Dept. General Surgery, Watford General Hospital

Devi Parvathareddy, MBBS

Dept. General Surgery, Watford General Hospital

Vishal Bhalla, B.Sc.

Dept. General Surgery, Watford General Hospital