Ipsilateral Spigelian hernias: just an infrequent variant?

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ABSTRACT

Spigelian hernias are generally considered to occur through solitary defects in the fascial layers of the anterior abdominal wall in the 'Spigelian hernia belt' but can be found anywhere along the line of the linea semilunaris. They are uncommon in children and in adults thought to be acquired and associated with obesity. We describe an unusual case of Spigelian herniation previously unreported and possibly previously unrecognised.

KEYWORDS

Hernia, Spigelian – General surgery

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Background

Spigelian hernias (van den Spiegel; 1578–1625) are generally considered to occur through solitary defects in the fascial layers of the anterior abdominal wall in the 'Spigelian hernia belt' but can be found anywhere along the line of the linea semilunaris.^{1,2} They are uncommon in children and in adults thought to be acquired and associated with obesity. We describe an unusual case of Spigelian herniation previously unreported and possibly previously unrecognised.

Case history

A 57-year-old overweight man presented as an emergency with a short history of lower abdominal pain and recurrent vomiting. Examination revealed a vague fullness in the right iliac fossa with computed tomography indicative of an incarcerated Spigelian hernia with adjacent oedematous small bowel. At operation through a limited midline incision, two distinct defects containing only incarcerated preperitoneal fat were found separated by 3cm of normal musculature. These were repaired with a single piece of prosthetic mesh in the preperitoneal plane. His recovery was uneventful and he remains symptom-free without clinical evidence of recurrence at nine months.

Discussion

Whilst Spigelian hernias are generally solitary, there is no reason why two nearby defects in the aponeurosis of the transverse abdominis (mainly below the arcuate line) cannot occur, particularly when acquired as opposed to congenital in origin. Both ultrasound and CT can be useful in the preoperative diagnosis but false negatives are not uncommon. The two neighbouring but separate ipsilateral defects demonstrated in our patient were only recognised when the CT images were reviewed postoperatively in the sagittal plane (Fig 1). While it is possible that this anatomical variant has not been described before, it is more likely that it has not been recognised, particularly at an elective open repair. A literature search did not find a similar anatomical description.

A 20-year review of 76 patients whose Spigelian hernias had been repaired in a tertiary referral centre (the Mayo clinic), documented a 4% recurrence rate at eight-year follow-up.⁵ All but one of these repairs was by an open technique. In contrast, over the last 20 years, many Spigelian hernias have been repaired using a laparoscopic approach but there are no similarly large single centre reports with adequate follow-up. Nevertheless, recurrence was described as 'minimal' when 237 repairs (from 50 centres) were scrutinised.⁴ We doubt that this variant is unique but the frequency must be scarce, given that many

more repairs are now performed in a preperitoneal plane and such a finding has not been described. Nevertheless, it would seem appropriate to carefully look at sagittal CT images preoperatively, particularly when an open repair is to be considered. In combination with a prosthetic mesh repair, this should allow more durable results in the longer term.

References

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