On-line Case Report

Timely computed tomography scan diagnoses spigelian hernia: a case study

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ABSTRACT

A spigelian hernia is a rare cause of acute abdominal pain and its diagnosis is often difficult to make. A CT scan of the patient demonstrated an incarcerated spigelian hernia containing small bowel which had subsequently reduced spontaneously. The patient underwent laparoscopic repair of her spigelian hernia the following day and made a fast and uneventful recovery. This case illustrates the importance of imaging a patient whilst symptomatic if the diagnosis of a spigelian hernia is entertained.

Keywords: Spigelian hernia – CT scan – Iliac fossa pain – Intermittent pain

Figure 1 CT scan showing an incarcerated spigelian hernia containing small bowel.

Case history

A 55-year-old female radiographer presented to the emergency department with acute onset of severe right iliac fossa pain. There had been a history of intermittent similar pain over the preceding 6 months, and she had been previously admitted to hospital with no cause found. There were no significant co-morbidities other than obesity. On this occasion, she was at work in the hospital when the pain began, and she was expediently transferred to the accident and emergency department. She was found to be tender in the right iliac fossa with guarding but no obvious mass was palpable. Inflammatory markers and plain abdominal X-ray were unremarkable. An urgent abdominal computed tomography (CT) scan was performed during which her pain resolved; by the time of surgical review 1 h later, she was pain-free with no clinical signs evident.

The CT scan demonstrated an incarcerated spigelian hernia containing small bowel (Fig. 1). This had

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subsequently reduced spontaneously. She underwent laparoscopic repair of her spigelian hernia the following day and made a fast and uneventful recovery.

Discussion

A spigelian hernia is a rare cause of acute abdominal pain and its diagnosis is often difficult to make. The symptoms are often vague, minimal and intermittent. The hernia occurs at the lateral border of the rectus muscle, typically within 6 cm of a line drawn between both anterior, superior iliac spines. Typically, the hernia penetrates through the transversalis and internal oblique fascia, but is intraparietal and contained by the external oblique fascia. This can make the clinical findings atypical of a hernia and difficult to palpate. This is even more likely to be the case in overweight patients where a small hernia may be completely impalpable. In a series published from the Mayo Clinic, only 64% had clinical findings on examination. The hernia can be diagnosed by either CT or ultrasound scan, but these can be falsely negative, and

unequivocal radiological diagnosis prior to surgery is rare.¹

Commonly, patients presenting to a hospital with acute right iliac fossa pain in the UK are initially managed expectantly unless a clear diagnosis is present. The provision of urgent CT scans in the UK is somewhat rationed and, in the authors' experience, it is very unusual to access immediate CT scanning to enable a rapid and accurate diagnosis. Without an expedient CT scan, the diagnosis would likely not have been made, and the patient may have continued to suffer from intermittent pain. A delayed CT scan may well have been reported as normal post-hernia reduction. This case illustrates the importance of imaging a patient whilst symptomatic if the diagnosis of a spigelian hernia is entertained.

Reference

1. Larson WD, Farley DR. Spigelian hernias: repair and outcome for 81 patients. *World J Surg* 2002; **26**: 1277–81.