Intestinal obstruction secondary to a congenital pre-iliac hernia

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Summary: A previously undescribed type of congenital abdominal wall hernia is described. Presentation was with the symptoms and signs of subacute large bowel obstruction. The diagnosis was suggested by barium enema and confirmed at laparotomy.

Introduction

An elderly man presented with subacute large bowel obstruction which was found to be due to incarceration of colon in a hernial sac in the anterior abdominal wall. On reviewing the classification of rarer abdominal herniae, it is suggested that the patient had a previously undescribed congenital hernia.

Case report

An 81 year old Caucasian male presented with a 2 month history of left lower abdominal pain. This was of gradual onset, localized to the left iliac fossa and associated with gradually increasing constipation. His bowel habit had changed from once a day to every 2–3 days, the stools were small and hard, and there was no blood or slime. Admission was precipitated by a 12 hour episode of colicky pain in the left iliac fossa.

On examination he was afebrile, his pulse was 84/minute and he was not shocked. His abdomen was soft and there was a 6 × 8 cm mass in the left iliac fossa. This was slightly tender, non-pulsatile and deep to skin but appeared to be involving the muscle layer of the anterior abdominal wall. Bowel sounds were normal and rectal examination revealed hard faeces. An erect chest X-ray was normal. A plain abdominal X-ray was also thought to be normal, although subsequently the films were seen by a consultant radiologist who suggested the diagnosis of an anterior abdominal wall hernia on the grounds of gas being visible external to the iliac crest.

A differential diagnosis of subacute large bowel obstruction secondary to either diverticular disease or neoplasm was made and initial treatment was by

observation, oral fluids and oral cotrimoxazole. Sig-
moidoscopy carried out on the day of admission
revealed normal mucosa to 15 cm.

On this regime his pain settled and his bowels moved, but the mass persisted. An urgent barium enema showed a smooth narrowing in the distal descending colon, with large bowel appearing to enter a hernial sac (Figure 1). The examination had to be terminated as the patient experienced severe lower abdominal pain. It was decided to proceed to laparotomy. Under anaesthetic the mass was easily palpable. On opening the peritoneal cavity the pelvic colon was seen to disappear through a 4 × 4 cm opening, 5 cm lateral to the rectus sheath and about 4 cm proximal to the mid point of the inguinal ligament (Figure 2). The sac extended out over the anterior superior iliac spine and over the lateral part of the inguinal ligament. The neck of the sac was clearly definable and it was seen to be constricting the large bowel. The contents of the sac were reduced and the defect repaired with mattress sutures of polydioxanone. Post-operative recovery was unremarkable and there was no evidence of recurrence at review three months later.

Discussion

The 'rarer' abdominal herniae account for 1.5% of the total.¹ Before presenting a hernia as being previously undescribed, it is important to consider carefully whether or not it belongs to one of these groups of rare herniae already documented. The hernia presented in this case did not involve the inguinal canal or deep inguinal ring and therefore could not have been an inguinal hernia. A Spigelian hernia passes through a defect in the linea semilunaris.² The hernia in the case presented arose from a defect considerably lateral to the rectus sheath and

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Figure 1 Barium enema. Contrast is seen outlining the hernial sac (arrowed).

thus by definition could not have been a Spigelian hernia. A lumbar hernia arises from below the 12th rib and above the iliac crest posteriorly. This excludes the hernia presented in this case as the primary defect was in the anterior abdominal wall. Could the hernia have been of the acquired type? An absolute answer to this question is not possible, but it must be remembered

Figure 2 Anterior view of pelvis showing position of hernial sac.

that there had been no previous surgery in this area, and that a well defined neck and sac were found. This suggests that the hernia was in fact congenital in nature. A further point is that it is unusual for a hernia to lie outside the iliac crest. Although herniae have been described as reaching this position by passing through a defect in the iliac crest after the taking of a full thickness bone graft,³ there is no published description of a hernia reaching this position in the absence of previous surgery.

It is well recognized that inter-parietal herniae may contain bowel and present with the symptoms and signs of intestinal obstruction, but a search of previous publications has failed to show any description of a congenital inter-parietal hernia crossing the iliac crest to lie in a pre-iliac position.

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