On-line Case Report

An unusual abdominal wall hernia

Ahmed R Ahmed, Anita Sharma, James Wellwood

Department of Surgery, Whipps Cross University Hospital, London, UK

An unusual hernia is described involving a defect in the right rectus sheath at the junction of its middle and lower third. This was associated with an extension of the sac anteriorly between the right rectus muscle and its overlying sheath.

Key words: Hernia – Abdominal wall – Pre-rectus laparocoele

A 25-year-old woman presented with lower abdominal pain precipitated by lifting some cushions. Following the initial episode, she noticed a bulge in the lower abdomen on standing, coughing and straining. She

had not had any previous surgery. She had two children aged two and four. On examination, a very small umbilical defect was identified. In addition, a palpable swelling was noted immediately to the right of the linea

Figure 1 View through laparoscope inserted above umbilicus in midline and looking caudally.

Correspondence to: AR Ahmed, Specialist Registrar in General Surgery, Whipps Cross University Hospital, Whipps Cross Road, Leightonstone, London E11 1NR, UK
Tel: +44 (0)7710 760113; Fax: +44 (0)20 8343 8044; E-mail: rahmed1@hotmail.com

alba at a level half-way between the umbilicus and the pubis. There was an associated expansile cough impulse. This point was marked on the skin with an indelible marker pre-operatively. The origin of the swelling was not clear but the differential diagnosis included a Spigelian hernia. A diagnostic laparoscopy was arranged electively. Laparoscopy was performed with a 5-mm laparoscope inserted in the upper midline, some 15 cm above the umbilicus.

The findings were: (i) divarication of the recti; (ii) a 4-mm umbilical hernia; and (iii) a somewhat abnormal right rectus muscle which was not fully adherent to the anterior fascia medially (Fig. 1). Thus, a recess existed between the right rectus muscle and its overlying anterior fascia wherein potentially bowel might enter and create the bulge seen by the patient as well as produce an expansile cough impulse on examination. There was a correlation between the site of this recess discovered at laparoscopy and the area previously marked on the patient's abdominal wall indicating the site where she could intermittently feel a lump.

Due to the low risk of this hernia getting strangulated, it was decided to leave the situation alone although, in theory, this hernia could have been repaired by: (i) anchoring the right rectus to its overlying fascia thus eliminating the recess; or (ii) by use of an intraperitoneal onlay mesh.

Discussion

A hernia is the protrusion of the abdominal contents beyond the normal confines of the abdominal wall.¹ The patient's symptoms were suggestive of a Spigelian hernia on clinical grounds. Laparoscopy was organised to confirm both the diagnosis and to treat with mesh repair. Interestingly, laparoscopy revealed an unusual hernia, which none of the authors has previously seen. A defect was found in the right rectus sheath at the junction of its middle and lower third. This was associated with an extension of the sac anteriorly between the right rectus muscle and its overlying sheath. The hernia described did not fit the classical description of a Spigelian hernia as it was not lateral to the rectus muscle, nor did it emerge along the linea semilunaris. In order to assess whether such an unusual hernia had been previously described, a literature search was performed, but no identical cases were found. We have, therefore, decided to name this hernia pre-rectus laparocoele of the abdominal wall.

Reference

1. Snell RS. *Atlas of Clinical Anatomy*. Little, Brown and Co Inc., 1978.