Management of a wandering spleen

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Wandering spleens are rare. They represent free-floating splenic tissue on abnormally long mesenteries which are prone to intermittent axial twisting, causing characteristic pain. The condition is distinct from ectopia (development of splenic tissue in unusual sites) in that a normally situated spleen is absent.

CASE HISTORY

A girl aged 16 had experienced intermittent abdominal pains for two months. There was no medical history of note and biochemical and haematological indices were within normal range. On examination there was a palpable suprapubic mass which on ultrasound was described as a homogeneous entity. Subsequent computed tomographic (CT) scanning defined a 16 × 9 cm lesion distinct from the uterus, ovaries and bladder and supplied by a large arterial branch. Small-bowel lymphoma was suggested.

On diagnostic laparoscopy via a 10 mm umbilical port, splenic tissue was identified beneath the transverse colon and there was no normally situated spleen in the left upper quadrant. A retrospective review of the CT scans confirmed this and a wandering spleen was diagnosed. After outpatient review and discussion, the patient received prophylactic vaccination against pneumococcal capsular antigens and *Haemophilus influenza* B, and was readmitted for 'splenopexy'.

At laparotomy, a macroscopically normal 'free floating' spleen attached to an abnormally long vascular pedicle (which was chronically torted) was delivered (Figure 1). A Prolene mesh was then fashioned into a pouch and sutured into the left upper quadrant. The derotated spleen was placed within this and secured inside (Figure 2). The patient made a good postoperative recovery and was discharged on a course of broad-spectrum antibiotics. She remains well and symptom-free at 1 year.

COMMENT

The normal spleen is covered by peritoneum except at its hilar surface but has very little mobility and is fixed to the posterior abdominal wall by the lienorenal ligament which contains the splenic artery and the tail of the pancreas. The spleen develops in the dorsal mesogastrium and with gut rotation moves posterolaterally to the left, with fusion of the dorsal mesogastrium to the posterior abdominal wall and the left kidney. The spleen is kept in its usual position by lienorenal and gastrosplenic ligaments and it is only when these are defective that a spleen can begin to 'wander'.

The first detailed description of a wandering spleen in a patient coming to necropsy is generally credited to Van Horne (1667). The condition has been described in patients aged from 3 months to 82 years[1,2]. The incidence is difficult to establish but in three large series of patients undergoing splenectomy[3–5] only 6 cases were described (0.15%).

What is the aetiology? There is much evidence pointing to a failure of the dorsal mesogastrium to fuse to the posterior abdominal wall in the second month of embryonic development, with resultant abnormally long splenic

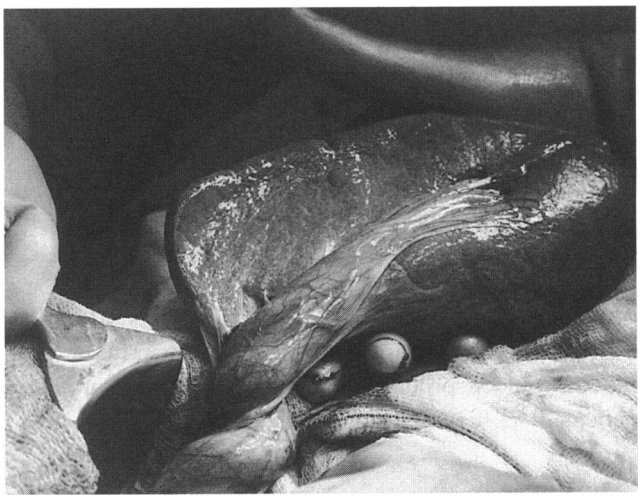

Figure 1 **Delivery of the spleen**

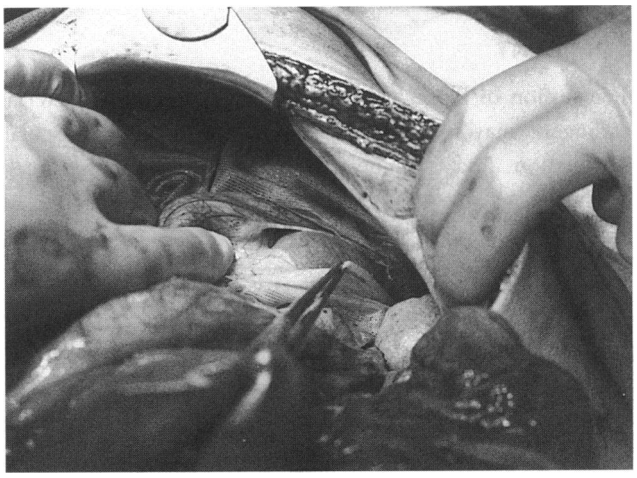

Figure 2 **Spleen secured in mesh pouch**

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pedicle. The condition is associated with other congenital abnormalities including the prune-belly syndrome, in which dilatation of the genitourinary tract interferes with gut rotation and fusion of the dorsal mesogastrium[7]. Some have suggested that it is the abnormal laxity of the splenic ligaments that is the primary aetiology[8]. An excess incidence in child-bearing years and in the multiparous has raised the possibility of ligamentous lengthening as a cause. Increased splenic mass has also been proposed as a possible aetiology but data regarding malarial and lymphomatous splenomegaly are conflicting; in most patients with a wandering spleen there is nothing wrong with the spleen itself[9].

Many patients with a wandering spleen are symptom-free, the condition being discovered incidentally on abdominal examination. Intermittent abdominal pains are a common mode of presentation[1]. Severe and persistent abdominal pain suggests splenic torsion which may vary from 90 to 160 degrees. Delay in diagnosis risks not only splenic infarction but also pancreatic necrosis[10].

How should a symptomatic wandering spleen be managed? At one time the favoured treatment was splenectomy, but this operation is now avoided when possible because of the spleen's important role in the reticuloendothelial system; therefore there is renewed interest in splenopexy. Torsion of the spleen and consequent infarction still necessitates splenectomy. All patients undergoing elective splenopexy should undergo pneumococcal vaccination in case the need for splenectomy should arise during splenopexy. Of the splenopexy techniques described[11], suturing of the spleen is said not to be complicated by haemorrhage—though some feel this applies only to paediatric splenopexy where a thicker splenic capsule is more forgiving[12]. Our approach, whereby a Prolene pouch is fashioned and secured in the left upper quadrant, is novel. The spleen can then be easily placed within and the pouch closed thus securing the spleen in its correct anatomical position.

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Successful non-operative management of an Achilles fracture

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Ectopic ossification of the Achilles tendon is rare but well recognized. Probably the most common causes are minor trauma and previous surgery[1], although similar lesions have been described in infection (including syphilis), renal failure, Reiter's syndrome and crystal arthropathies[1–3]. The ossification commonly causes no symptoms and pain should arouse suspicion of a fracture[4]. Where fracture is found, the surgical options include resection with soft-tissue reconstruction, and wire fixation[3,5,6]. We describe a case managed non-operatively.

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CASE HISTORY

A woman aged 67 was seen at her local orthopaedic unit with a one-year history of posterior right ankle pain. She had not suffered any previous trauma to her Achilles tendons and had not been engaged in any unusual activities. No predisposing factors could be elicited. On examination, tenderness was localized to the distal Achilles tendon, but the Achilles mechanism was intact. Radiographs revealed ectopic ossification in the distal three centimetres of the calcaneal tendon and she was advised to have this surgically resected. Whilst on the waiting list for this procedure, she