

Red hemiscrotum in a child with abdominal pain



Courtesy, Jacob Langer

This previously healthy 5-year-old boy presented to hospital with a 2-day history of abdominal pain and nonbilious vomiting, with no change in bowel habits. Originally periumbilical, the abdominal pain had shifted to the right side of the abdomen over 24 hours, gradually worsened and ultimately became diffuse. At presentation the boy had a fever (temperature 38.5°C) and diffuse peritoneal signs consisting of percussion and “shake” tenderness, and rebound tenderness in all quadrants. He was noted incidentally to have erythema in the right hemiscrotum (Fig. 1). There were no testicular masses, the testis was nontender, and no inguinal hernia was palpable. Imaging studies were not performed.

The boy underwent appendectomy, which confirmed the presence of acute perforated appendicitis with diffuse peritoneal contamination. A patent processus vaginalis was identified at the right internal inguinal ring. He received 10 days of intravenous therapy with gentamicin, ampicillin and metronidazole, and the scrotal erythema resolved.

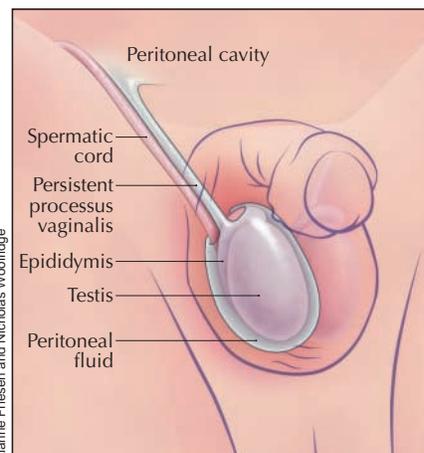
This case of scrotal inflammation was caused by intra-abdominal pus

tracking through a previously undiagnosed patent processus vaginalis. The processus vaginalis is a finger-like sac of peritoneum that follows the testis during normal testicular descent and usually disappears before birth (Fig. 2). It remains patent in about 20% of individuals,¹ most of whom will be asymptomatic throughout their lifetime. However, in about 20% of people with a patent processus vaginalis, a clinically evident bowel hernia or communicating hydrocele (which consists of fluid without bowel in the processus vaginalis) will result.

The tracking of pus and microorganisms from an intra-abdominal source through a patent processus vaginalis into the scrotum is rare, having been reported only a handful of times, and almost always in children.²⁻⁶ The scrotal infection may be successfully treated in many cases with antibiotics alone (as in this case), or it may require surgical drainage if an abscess with frank pus develops.

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