Case 1227

Patent processus vaginalis
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Section: Uroradiology & genital male imaging
Technique: Plain radiographic studies
Case Type: Anatomy and Functional Imaging
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Patient: 56 years, male

Clinical History:

Investigation of groin pain in a 56-year-old male by herniography.

Imaging Findings:

This patient was being investigated for left-sided groin pain. A thorough clinical examination, an intravenous urogram and an ultrasound scan of the renal tract were unremarkable. As a last resort, a herniogram was performed to elucidate the cause of groin pain. This demonstrated persistence of the processus vaginalis, partially closed on the right and completely patent on the left.

Discussion:

This case highlights an unusual presentation of patent processus vaginalis. Although theoretically described, radiological imaging of this condition has not been published before. This case also demonstrates the usefulness of herniography in cases of unexplained groin pain.

The technique of herniography is well described in the article by Ekberg (Ref. 1). Our technique is slightly different. Most radiologists use a 20G lumbar puncture needle. We use a 18G Verres' needle (Surgineedle by Autosuture), which is usually used to produce a pneumoperitoneum in laparoscopic procedures. The midline sub-umbilical approach is practised. The advantages are a reduced chance of injuring the bowel and ease of injecting contrast medium into the peritoneum.

Soon after birth, the processus vaginalis becomes occluded at two points, first at the internal abdominal ring and secondly just above the testis. This occlusion of the processus just above the testis, cuts off part of the sac from the peritoneal cavity. Henceforward this is known as the tunica vaginalis. The part of the processus vaginalis between the internal abdominal ring and the testis becomes obliterated forming a fibrous cord. By definition, a patent processus vaginalis is only a potential hernia.


References:

Description: Contrast is seen to flow from the peritoneal cavity through the left processus vaginalis into the tunica vaginalis. The testis can be seen as an oval filling defect within the tunica vaginalis. On the right, the processus vaginalis is partially obliterated. Origin: