Diagnostic Images

Scrotal deficiency – localized

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The patient

A man age 23 presented to the infertility clinic. On examination he had only one testis.

Investigation

Sonography, computed tomography and retrograde testicular venography.

Comment

Scanning methods whether sonography, computed tomography or magnetic resonance imaging have a sensitivity of over 90% for masses greater than 1 cm in diameter but are relatively nonspecific. In the appropriate setting angiography whether arterial or venous can be more specific as in this patient.

Confirmation of the nature of the mass and the site of the undescended testis helps to plan the surgical approach though it could be argued that for a localized mass surgery would in any case be indicated and a lymph node could be excluded by percutaneous cytology/biopsy.

However, a resulting haematoma could well prejudice the chances of a successful replacement of the testis into the scrotum. Tissue 'characterization' after identification of such a 'mass lesion' was therefore deemed to be important.

Figure 1 Sonography. A relatively poor echogenic mass, (arrow) well defined and measuring 2.5×1 cm was demonstrated behind the bladder (B) on the longitudinal scan. The appearances suggested this was the missing testis being similar to an ovary but an enlarged lymph node could not be excluded.

Figure 2 Computed tomography. A similar mass was shown on the right between the bladder (B) and the ilio-psoas muscle (I-P) lying posterior to the external iliac vein (V). However, once again no specific features were identified to distinguish a possible aberrant testis from an enlarged lymph node.

Figure 3 A retrograde right testicular venogram showed the characteristic appearances of the pampiniform plexus (white arrow) with the 'avascular' testis (arrowhead) immediately below where it was indenting the pampiniform plexus as it was lying adjacent to the bladder. The curved arrow indicates the dislocated epididymis in the inguinal canal.