



Testicular Cyst Detected Incidentally in a Patient with Fournier's Gangrene

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A 76-year-old male patient presented with a fever and testicular pain and tenderness. A scrotal examination revealed erythema and purulent discharge of the overlying skin (Fig. 1a). Ultrasonography (USG) revealed a thickened right scrotal wall and an abscess formation under the scrotal skin consistent with Fournier's gangrene. The size of both testicles was within normal limits, however, a cystic lesion was detected in the right testicle. The tumor markers in the blood were normal. A right orchiectomy was performed due to the abscess and the suspicion of a testicular neoplasm. A gross examination revealed a unilocular cyst within the testicular parenchyma, 4 cm in greatest diameter (Fig. 1b). Microscopic evaluation indicated that the cyst wall had a flattened epithelium consisting of a single layer of cuboidal cells (Fig. 1c). Suppurative inflammation was seen in the dermis and subcutaneous fat tissue of the scrotum. Immunohistochemical staining revealed that the epithelial lining of the cyst wall was diffusely positive for cytokeratin 7 and human bone endothelial cell marker-1. The case was reported as a simple cyst of the right testis associated with Fournier's gangrene.

A simple cyst of the testis is a rare lesion. The cyst is separated from the tunica albuginea, contains clear fluid, and the wall is lined by single layer of cuboidal cells (1). It is important to distinguish benign cystic lesions from malignant tumors based on the absence of internal echoes (2). Multiple transverse and longitudinal scans must be performed, since a vessel might be confused with a cyst in the oblique plane. More dangerously, tumor necrosis within the testis parenchyma might mimic a cyst. A small, slightly more echogenic rim surrounding the cyst need not cause any alarm, since this is may be caused by compression of normal parenchyma. High-resolution sonography can help to detect solid testicular lesions early before they become clinically evident. The management of patients with these lesions should be conventional. However, treatment is controversial; options may include radical orchiectomy, enucleation of the cysts with testicular parenchyma preservation, or conservative monitoring using USG (3).

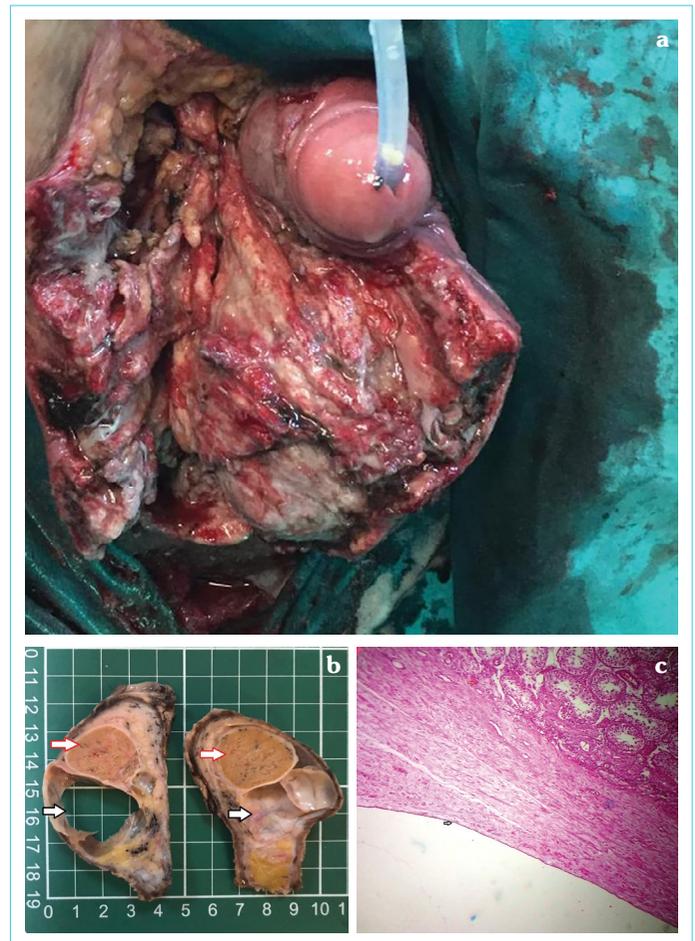


Figure 1. (a) Macroscopic view of Fournier's gangrene. (b) Macroscopic view of normal testis parenchyma (red arrow) and cystic lesion (white arrow). (c) Microscopic view of the epithelium of the cyst wall lined by a single-layer of cuboidal cells (black arrow) and normal testis parenchyma (red arrow) (H&E; x400)

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In conclusion, a simple cyst should be kept in mind in the differential diagnosis of testicular masses, since recognizing this lesion could provide the means for more conservative treatment, especially for reproductive men.

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