Simple Intratesticular Cyst: A Case Report

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It is a standard urological teaching that an intratesticu Jar mass is cancerous until proved otherwise and in 93% of cases. it is true1. Benign testicular tumours are rare and represent only 1-3.5% of all testicular growths[1,2] and ofthesetrue cysts of the testis are the least common[3]. Clinically these masses may be difficult to differentiate from a more ominous solid neop lasm. We report a case of as irn pIe intratesticular cyst that was accurately diagnosed by ultrasound examination preoperatively.

Case Report

A 52-year old man investigated for secondary infertility was found to have a mass in his right testis for which surgical exploration was suggested. Medical history was unremarkable apart from epilepsy for which he had been treated with Tegretol. Physical examination showed no abnormality apart from a non- transilluminable mass of 3 cm size located in the lower pole of the right testis. Ultrasound examination showed this mass to be a 2.8 cm well- defined simple appearing cyst in the lower pole of the testis (Figure).

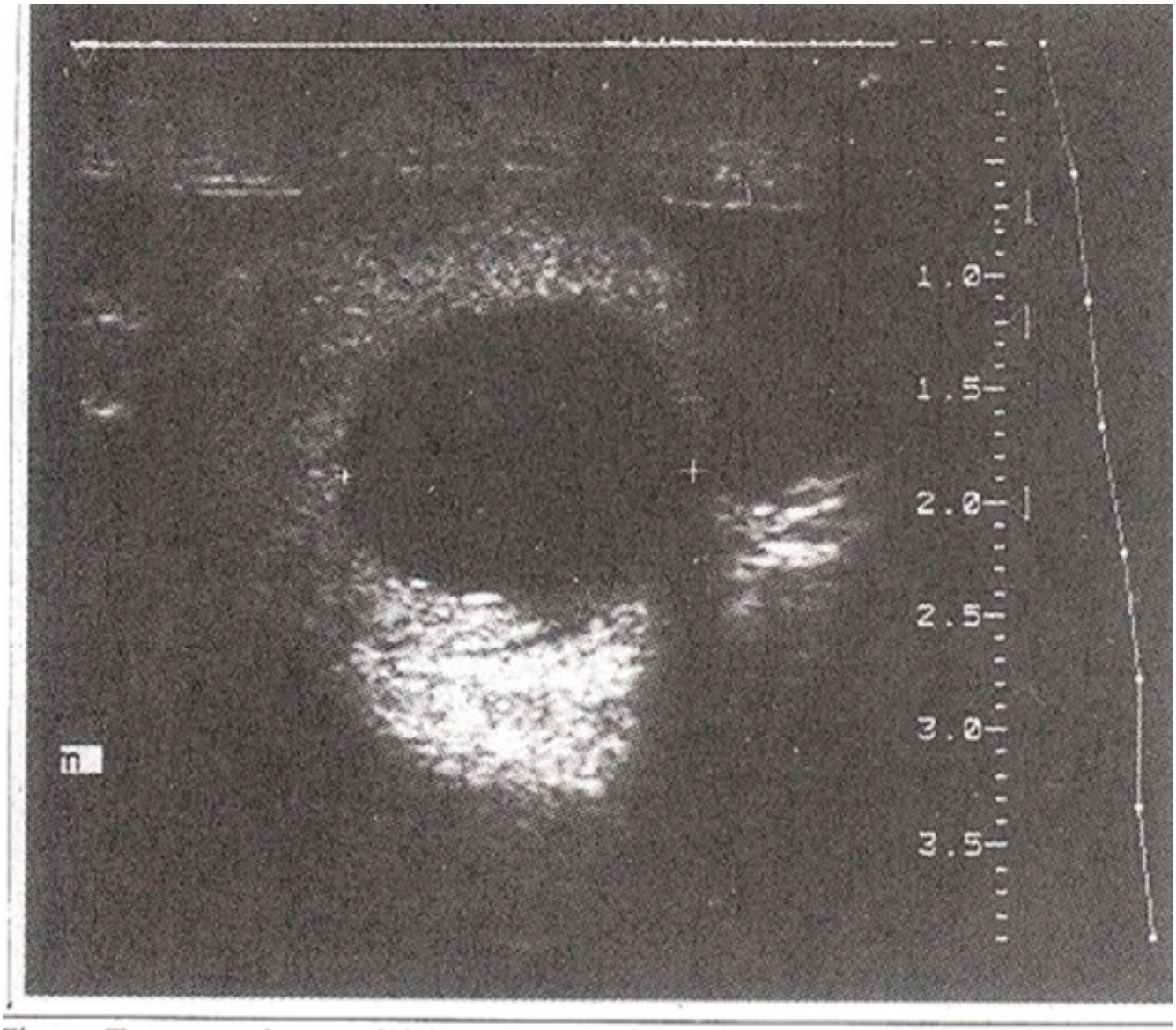

Figure. Transverse image of right testicle demonstrating a simple appearing cyst in its infero-medial aspect.

The left testis was unremarkable. Tumour markers were within normal range. Patient was assured that this was a simple cyst and the diagnosis of malignancy was unlikely. As the possibility of malignancy had been raised by the referring physician, the patient wanted to have the mass removed. Through a transverse scrotal incision, the right testis was explored and the cyst was seen at the lower pole. Clear fluid was aspirated from the cyst which showed no malignant cells. The cyst was completely excised and a biopsy from the right testicular tissue was done. Histopathological examination revealed fibroadipose tissue lined with mesothelium and the diagnosis was benign mesothelial cyst. Tile testicular biopsy showed marked fibrosis and atrophy with no spermatogenesis.

Discussion

True simple testicular cysts are rare. Schmidt[5] was the first to describe a simple testicular cyst and upto 1992 these were only 6 cases reported in the English literature[4]. Many benign testicular tumors are comp letely asymptomatic and only a high index of suspicion for malignancy leads to further

investigations. The presence of a testicular mass should not automatically be interpreted as malignancy, because this may lead to incomplete studies and inappropriate management. Undoubtedly, as the use of ultrasound increases, more masses within the testicle will be detected and sonic of these will be benign[6]. Scrotal sonographv using high frequency transducers (scan head frequency 7.5 - 10 MHz) is a sensitive method of establishing the site and morphology of space occupying lesions[9]. In these cases. ultrasound facilitates the differentiation between the cystic and solid tumor portions.

The dem on stration of i ntratesti cu 1 ar cysts, h owever, poses a diagnostic problem because not only simple cysts but also neoplastic cysts of the testis need to be considered[7]. Among the testicular tumors, cysts are formed primarily by teratomas[8]. A simple cyst of the testis should be readily distinguished on ultrasound examination and thus be differentiated from other benign and malignant lesions. Pathological abnormalities of the scrotal contents may be diagnosed by ultrasonography with a sensitivity of98.5°/[13] and a specificity of 88%[14].

The etiology ofsimple cysts is unclear. Ectopic epithelium perhaps of Wolfian duct has been suggested as a possible cause[5] but the occurrence ofthe cyst in middle aged men, as in our case, has been argued against the ectopic vestigial Wolfian duct as a source[12] Traumatic and inflammatory causes have also been suggested[15] but the absence of a previous history of trauma or infection in majority of cases, like ours, make these suggested etiologies less likely[4]. More recently, Haber and Cohen[4], after using "immunohistochemical" and other special stains, have strongly supported the Schmidt's proposal that this lesion arises from ectopic epithelium. Opinions on the treatment ofchoice for benign intratesticular lesions are divided[13]. Radical orchidectomy has been suggested because of the possibility that benign lesions may co-exist in the testicle with unrecognized malignant areas. However, this should be unnecessary fora benign lesion, as a simple cyst and exploration with excision of the mass would be preferable if the diagnosis could be assured preoperatively[7].

Surgical excision of a cyst sparing testicular parenchyma is recommended for symptomatic patients or to confirm the diagnosis histologically if there is any indication to do so. A more conservative approach of surveillance has been advocated recently[12] especially when the sonograph ic diagnosis is unequivocal. We recommended the surveillance approach to our patient but had to resort to excision of the cyst to relieve the patient's anxiety regarding the possibility of malignancy as had been suggested by his referring physician.

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