

Fibrous Pseudotumor of Testis

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Abstract

Fibrous pseudotumor is an uncommon lesion involving the paratesticular region. It represents a benign, probably reactive process which may mimic malignancy. It usually presents in nodular form which can be treated by testicular sparing procedures. We hereby present a rare case of diffuse fibrous pseudotumor which had to be treated by orchiectomy.

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INTRODUCTION

Fibrous pseudotumor of testis, an uncommon lesion, was first recognized by Ballock in 1904 [1]. Fibrous pseudotumor of testis is known to be the second most common paratesticular tumor involving the paratesticular region after adenomatoid tumor and represent a benign probably reactive process of the testicular tunics. It has been known by multiple names including inflammatory pseudotumor, chronic proliferative periorchitis and fibrous mesothelioma. Although fibrous pseudotumor of testis affects patients of all ages, highest incidence of fibrous pseudotumor is in the third decade of life. Therefore, it is an important diagnostic consideration in young patients presenting with painless scrotal swelling [2]. We report an unusual case of diffuse fibrous pseudotumor that almost completely encased the right testis.

CASE REPORT

A 25 year old man, presented with a painless enlargement of right testis. The case was referred to our medical center from other hospital. No radiological or serological studies for tumor markers were performed in this center. On examination, a nontender firm irregular testicular mass was noted. No lymph nodes were palpable. In view of clinical suspicion of testicular malignancy, a right high inguinal orchiectomy was performed. On gross examination, specimen weighed 205 g and measures 12.5x6x6 cm. Cut section showed testis completely surrounded by a grey white firm fibrous and glistening lesion with focal cystic and necrotic areas (Figure 1). Microscopy showed testicular parenchyma and epididymis encased by a diffuse dense fibrocollagenous stroma containing chronic inflammatory infiltrate, myofibroblasts, thick walled blood vessels and dense collagen bands (Figure 2). A final diagnosis of diffuse fibrous pseudotumour was rendered.



Figure 1. Large paratesticular mass partly encasing the testis, which is seen at one end (arrow).

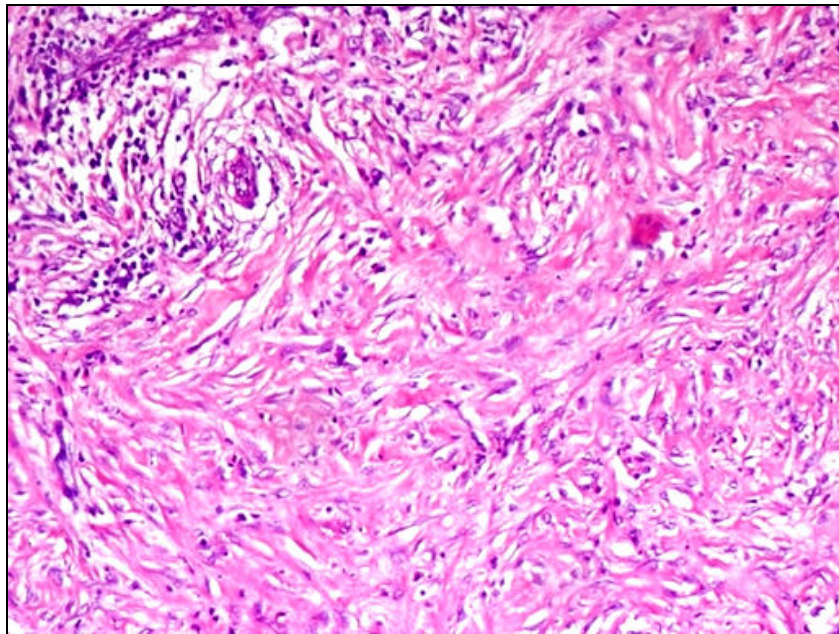


Figure 2. Fibrous pseudotumor consisted of dense fibrocollagenous stroma with mixed chronic inflammatory infiltrate (H& E, x100)

DISCUSSION

Fibrous pseudotumor is known to be the second most common paratesticular tumor and affects patients of all ages, highest incidence being in the third decade of life. These lesions may be of varying sizes and frequently present as unilateral scrotal mass. Bilaterality is however rare. When large, they can raise a concern of testicular malignancy on clinical evaluation. These lesions are known to be benign and reactive in nature [3,4]. The etiology of these tumors is unknown. Most often patients give a previous history of hydrocele, trauma or infection [2]. However, no such history was elicited in our case. Macroscopically, these tumors present as single or multiple firm, ovoid nodules and occasionally as diffuse band-like fibrosis of the testicular tunic with encasement of the testes. Microscopically, dense hyalinized collagen stroma with para-cellular fibroblastic or myofibroblastic activity and chronic inflammation, patchy granulation tissue, calcification, myxoid change or even ossification may be seen [5]. These tumors are differentiated from other tumors of the testicular tunics like solitary fibrous tumor showing spindle cells in patternless pattern, leiomyoma with smooth muscle cells in interlacing fascicles, fibroma of the tunics and idiopathic fibromatosis with proliferating fibroblasts in a bed of collagen. These lesions can also be differentiated based on the presence or absence of infiltrative borders. [1]

A definite preoperative diagnosis of fibrous pseudotumour may not be possible due to its nonspecific features. Intraoperative frozen sections may be useful in establishing the correct diagnosis and for testicular sparing procedures [1]. However, in the diffuse form of fibrous pseudotumour that encompasses the testis, as in the present case, preservation of testis may not be possible and as a result undergone orchiectomy.

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