

Bilateral Synchronous Paratesticular Leiomyoma: A Case Report

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ABSTRACT

Paratesticular leiomyoma is an extremely rare neoplasm of the paratesticular tissue which was rarely reported in the literature and as a solitary entity not as bilateral and it carries low potential for malignant transformation. We reported a case of a 75 year old male patient with bilateral synchronous paratesticular leiomyoma who was treated surgically.

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Introduction

Leiomyomas are defined as benign soft tissue lesions of smooth muscles origin which were first introduced in 1854 as a solitary lesion followed by the introduction of the hereditary form in 1958 which appear as multiple leiomyomas by Virchow.⁽¹⁾

Leiomyomas can originate from any site of the human body which contain smooth muscle component including cutaneous, gastrointestinal, cardiac and genitourinary with uterine leiomyoma (also called myoma or fibroid) to be the most common gynecologic neoplasm with a percentage of 20-30% of reproductive age women.⁽²⁾

We report a case of bilateral synchronous paratesticular leiomyomas in a 75 year old male patient as an extremely rare tumor.

Case Report

A 75 year old male patient with no previous medical illness presented to the Urology clinic in prince Rashid bin Al-Hassan hospital in March 2012 with the chief complaint of bilateral intrascrotal masses which first appeared seven years ago and started to increase in size slowly

since that time.

The patient reported a sensation of scrotal heaviness but no scrotal or testicular pain, no urinary or gastrointestinal symptoms, no history of fever and no history of scrotal trauma or surgeries.

Physical examination

The patient has normal external genitalia appearance with no signs of trauma or infection. Both testis were palpable in the scrotum and were normal in size and of firm consistency, normal both epididymis. Nontender oval shape 2x2cm well circumscribed hard masses were palpated in the paratesticular regions bilaterally separate from the testis and epididymis as shown in Fig 1, 2.

No inguinal lymph node enlargement or abdominal masses were found.

Investigations

Urinalysis, urine culture, complete blood count (CBC), prothrombin time (PT) / partial thromboplastin time (PTT), blood coagulation profile, kidney function test were within normal limits. Tumor marker study including serum alpha-fetoprotein and human chorionic

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Fig. 1: Shows the mass and its dimensions



Fig. 2: Shows its relation to testis



Fig. 3: Intraoperative findings



Fig. 4: The mass separate from testis



Fig. 5: The mass in 4x4 gauze complete excision

gonadotropin levels was normal. Chest x-ray and abdominal ultrasonography were also unremarkable.

Scrotal ultrasonography showed mixed echogenicity 2x2x2.4cm mass lesion in both sides of the scrotum separate from the testicles with a clear line of cleavage, normal both testis and epididymis and no hydrocele.

Plan of Management

Through discussion with the patient about his condition we explained to him that these masses are most probably benign lesions and warrant only paratesticular mass biopsy to confirm the diagnosis but the patient was so worried that he asked to be treated as malignant process until proven otherwise so our decision was to perform scrotal exploration starting with the left testicle so through an inguinal approach and after informing the patient of the possibility of radical

orchidectomy the left testis and all its surrounding strictures were extracted through the inguinal incision with the vascular clamp in position showing us that the mass was completely separate from the testis and epididymis, whitish in color and with the same description noticed in the clinical examination. So part of the mass was sent for frozen section and the result came on as a benign lesion which made us to perform excision of the mass alone which was dissected easily from surrounding structures and excised in one piece and sent for the histopathologist. Then we reset the testis to its normal position in the scrotum, the wound was closed in the appropriate manner and the patient was informed of the whole procedure and was given an appointment to return back to the out patient clinic after three weeks.

Histopathology report came on after two weeks with the diagnosis of paratesticular leiomyoma,

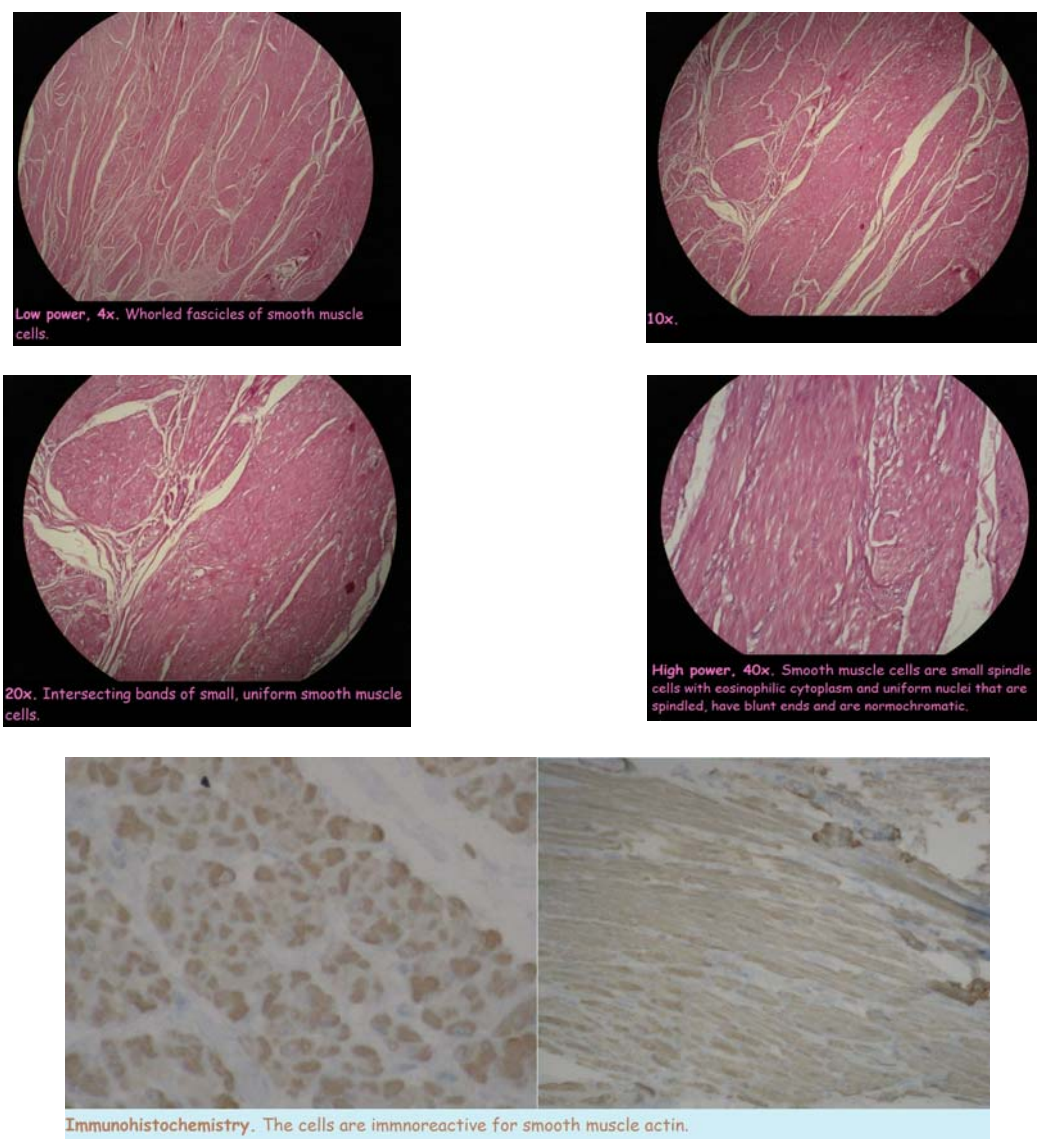


Fig. 6: Show the histopathological features of the mass

then the patient showed up 3 weeks later, informed about the result and after discussion of the case with him he asked to remove the other right lesion through a scrotal approach which was done as shown in Fig. 3, 4, 5, and sent for the histopathologist who gave us the same diagnosis.

Pathologic Feature

Received in the fixed state is a left paratesticular mass, the gross appearance was that of a circumscribed whitish-grayish firm mass measuring 2x2x1.5cm. The cut surface is whitish, solid and whorly.

Microscopy

Sections reveal a well circumscribed benign tumor composed of proliferation of smooth

muscles arranged in fascicles. Final diagnosis consistent with leiomyoma.

The Fig. 6 shows the histopathological features of the mass. The right paratesticular mass had the same report.

Discussion

Testicular cancer is now considered as the most common malignant neoplasm in males in the 15-35 year age group and is one of the most curable neoplasms with the advantage of accurate tumor markers: alpha-foetoprotein and human chorionic gonadotropin. As it is usually presents as asymptomatic swelling, any testicular mass should alarm the physician to consider it as malignant until proven otherwise.^(3,4)

Paratesticular tumors or as also called tumors of testicular adnexa are rare tumors with the adenomatoid tumors (as leiomyomas) consider as the most common paratesticular tumors accounting for about 30% of all paratesticular tumors. The etiology of leiomyomas remains obscure⁽⁵⁾ so as the origin of these tumors also are considered unknown although some theories suggest the possibility of reaction to inflammation or injury.^(3,6)

Chiong E *et al* in their study reported that paratesticular tumors comprise a heterogeneous group of benign and malignant lesions with a percentage of 20% to be malignant.⁽⁷⁾

Yih-Chou Chen reported the incidence of bilateral paratesticular leiomyomas from literatures review to be as high as 17.7% but this percentage included cases where intratesticular leiomyoma were reported in addition to the cases paratesticular leiomyoma.⁽⁸⁾

Other authors describe them as very rare tumors but all authors considered them as benign tumors with no single documented case of metastasis.^(3,7)

Genitourinary leiomyomas were reported in the literature in other parts than the paratesticular tissue with the most common site to be the renal capsule and the other locations to be renal pelvis, glans penis, bladder, Vas deferens and finally leiomyoma of the epididymis which was treated by partial epididymectomy.^(9,10)

Conclusion

Paratesticular leiomyomas are rare benign tumors which have the same presentation of testicular tumors and should be considered in the

differential diagnosis of testicular masses as they are of benign behavior and warrant testicular preservation treatment.

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