Giant Spermatic Cord Liposarcoma in Older Patient: Case Report

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Abstract

We report a case of giant spermatic cord liposarcoma in an 80 year old patient, initially treated as an inguinal hernia due to a large left inguinoscrotal mass. Spermatic cord liposarcoma is a rare tumor, and only some 200 cases have been reported in the literature. About 20% of liposarcomas are retroperitoneal, involving only 0.1% of the inguinal mass, typically confused with inguinal hernia. We treated the patient with organ sparing surgery, preserving the testicle, without chemotherapy or radiotherapy. Follow-up for six months showed good response, without recurrence or metastasis.

Keywords: Liposarcoma; Inguinal mass; Spermatic cord

Introduction

Tumors of the spermatic cord are rare and generally hard to diagnose. Most are benign, and when malignant they are almost always sarcomas. Here we report a case of giant spermatic cord liposarcoma in an 80 year old patient, presenting scrotal mass initially diagnosed as an inguinal hernia.

Spermatic cord liposarcoma is a rare cause of inguinal mass. These tumors can closely mimic inguinoscrotal hernia upon physical examination. However, these tumors require a different surgical approach and treatment plan. Liposarcomas are tumors that occur mainly in retroperitoneum: Only 3% to 7% are found in the paratesticular region. The spermatic cord is the main place of origin in these cases. This malignant disease can result in loss of fertility, in addition to life threatening sequelae.

Case Presentation

A.S.D.F, 80 years old, presented weight loss (10 kg in 6 months) associated with normocytic and normochromic anemia and a giant inguinoscrotal mass on the left with a 5 year evolution. Computed tomography of abdomen and pelvis indicated the presence of a massive left inguinal hernia with fatty contents (Figure 1).

The patient was referred to a medical clinic where he was evaluated by proctology and submitted to general surgery due to the suspicion of consumptive intestinal focus syndrome, and inguinal hernia, respectively. Finally, he was evaluated by urology, in which the surgical procedure was indicated, due to suspicion of inguinal cord liposarcoma. Total inguinal mass resection with preservation of the testis and free margins was performed (Figure 2). He evolved well in the postoperative period and was discharged after five days for outpatient follow-up. The histopathological report evidenced the presence of well differentiated liposarcoma (Figure 3). The patient was referred to clinical oncology and opted not to undergo radiotherapy or chemotherapy, even in the case of lesions greater than five centimeters, but grade I, with favorable pathology, due to his advanced age. The risks of complications would outweigh the benefits. He remains in good general condition, so far without recurrence, six months after the surgery.

Discussion

Sarcoma of the spermatic cord was first reported by Lesauvage in 1845 [1]. Based on case reports since then, it appears that most patients with spermatic cord liposarcomas develop the condition in the fifth or sixth decade of life, with an uneven, painless, irregularly growing inguinal or inguinocrotal mass that is distinct from the testis [2-4]. Diagnosis of spermatic cord liposarcomas in the preoperative period may be challenging, since this clinical presentation can indicate several more common conditions, such as inguinal hernia, lipoma, hydrocele, epididymal cyst, funicular...
cyst or testicular tumors [2,5-8].

On ultrasound examination, a liposarcoma of the spermatic cord usually presents heterogeneous echogenicity. However, these ultrasonographic findings have no specificity. Computed tomography is suggestive of diagnosis in approximately half of the cases and helps to determine the involvement of the anterior abdominal wall and/or retroperitoneum [1,5,9,10]. They can be classified into four groups: well differentiated, myxoid, round cell or pleomorphic type. The first two are the most cited in the literature and have better prognosis. Some authors advocate the theory that a liposarcoma may arise due to degeneration of a previous lipoma, but other reports say the opposite [11].

The size of the tumors can range from 3 cm to 30 cm in diameter and they tend to be gray white or yellow. Most of them are lobulated or nodular and in some cases a certain degree of necrosis may be present.

Current standard treatment strategies for these tumors include radical orchiectomy with extensive local excision of surrounding structures and with high ligation of the spermatic cord. Even in well-differentiated liposarcomas, local recurrence is high. In this case, a broad excision of the inguinal canal, with or without orchiectomy, should be performed if not previously done. Adjuvant radiation or chemotherapy is not well established, although there is some evidence supporting high grade chemotherapy, especially for rhabdomyosarcomas [12,13].

Some studies report a 5 year overall survival rate of 75% for well differentiated tumors. Some risk factors for recurrence have been defined and include tumor grade, size, depth of invasion, and most importantly, surgical margin status [14,15].

Although this is an uncommon condition, so few cases have been reported in the literature, the current trend is focused on organ sparing surgery, involving fewer multi layers, especially in well differentiated liposarcomas or in patients with advanced age, and comorbidities, since even with high local recurrence, these are late. Some authors have already reported that complete excision of the tumor, if possible, can be performed with the intention of preserving the testis, as in the case presented here [16,17]. Radical surgery remains the gold standard and rigorous follow-up should be maintained over the long term. Every effort should be made to report new cases with organ-sparing surgeries, to enable improving patient outcomes in the future.

References


