



Case Report

Giant Spermatic Cord Liposarcoma

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We report a case of giant spermatic cord liposarcoma (SCL) in an 81-year-old patient, presenting with a huge scrotal mass that reached up to the knee joint. SCL is a rare tumor, and about 200 cases have been reported in the literature so far. Although 20% of liposarcomas arise in the retroperitoneum, only 0.1% present as incidental inguinal hernias. The occasional presence of myxoid stroma in well-differentiated liposarcomas can lead to confusion with myxoid sarcoma subtypes. Correct diagnosis is critical and reflects remarkable differences in behavior and therapeutic choices.

Key words: Liposarcoma – Spermatic cord – Scrotal mass

Spermatic cord liposarcoma (SCL) is a very rare tumor, and about 200 cases have been described in the literature up to date. Clinically, these tumors can sometimes mimic the common scrotal masses such as hernias, testicular cancer, and hydrocele. Their histologic heterogeneity reflects remarkable differences in both prognosis and treatment. We report a case of SCL in an 81-year-old patient presenting with a huge scrotal mass.

Case Report

An 81-year-old Caucasian man was admitted to the hospital with a giant, painless, scrotal mass that started growing 4 years before presentation, showing a progressively increasing volume over time. The patient had a previous history of laryngeal carcinoma treated with curative surgery. Two weeks prior to hospital admission, he developed acute

urinary retention due to a severe concealed penis, requiring prompt bladder catheterization. Physical examination showed a greatly enlarged scrotum due to a huge lobulated mass extending to the knee level (Fig. 1). The scrotal skin appeared highly stretched, but otherwise normal.

Ultrasound examination revealed a hyperechoic and inhomogeneous mass, along with the superior and lateral dislocation of both testes. Contrasted computed tomography (CT) documented fat attenuation intermixed with soft-tissue attenuation nodules along with no evidence of regional lymphadenopathies. The patient underwent complete excision of the mass (Fig. 2) with high dissection of the spermatic cord and radical right orchiectomy (weight of the specimen, 5130 g; size, 28 cm × 30 cm × 15 cm). On macroscopic examination, the tumor presented multiple yellowish-white rubbery nodules (Fig. 3). Histology re-

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Fig. 1 Huge lobulated scrotal mass extending to the knee level with associated severe concealed penis. A Foley's catheter has been inserted.

vealed a well-differentiated liposarcoma with mixed degeneration arising from the right spermatic cord and in continuity with the testis. The patient did not undergo any adjuvant radiotherapy or chemotherapy and is currently disease free at 5-year follow-up after surgical resection.

Discussion

Liposarcomas account for 3% to 7% of malignant paratesticular tumors, presenting as incidental inguinal hernias in only 0.1% of cases. Lesauvage first reported SCL in 1845,¹ and about 200 cases have been described in the world literature so far.

At gross examination, SCLs appear as heterogeneous, multilobulated, well-defined, lipomatous masses, with variable consistency on palpation. The most common CT finding of well-differentiated SCL is a large mass of fat attenuation (>75% of the lesion) intermixed with nonlipomatous thick septa or soft-tissue attenuation nodules.²

The differential diagnosis includes inguinoscrotal hernia, testicular cancer, and hydrocele. Giant inguinoscrotal hernias are defined to extend below the midpoint of the inner thigh in the standing position.³ Omentum and small bowel are commonly found in the hernia sac. Care should be taken to identify the potential complications, which include intestinal occlusion, incarceration, and strangulation of the contents.



Fig. 2 The mass has been totally pulled out from the scrotal sac. The spermatic cord (asterisk) has been encircled with blue vascular tape.

Testicular cancer affects males mainly in their young adult years. Germ cell tumors represent the most common histotype, occurring in 95% of cases. Up to 90% of patients present with a painless scrotal mass, with a history of trauma or bruising and hydrocele or hernia in less than 10% of cases.⁴

Hydrocele is a fluid collection that occurs in the inguinal canal as a result of congenital nonclosure of the vaginal process. Giant hydrocele has been defined as having more than 1000 ml of contents.⁵ Groin swelling and a fluctuant palpable mass are typically observed at physical examination.

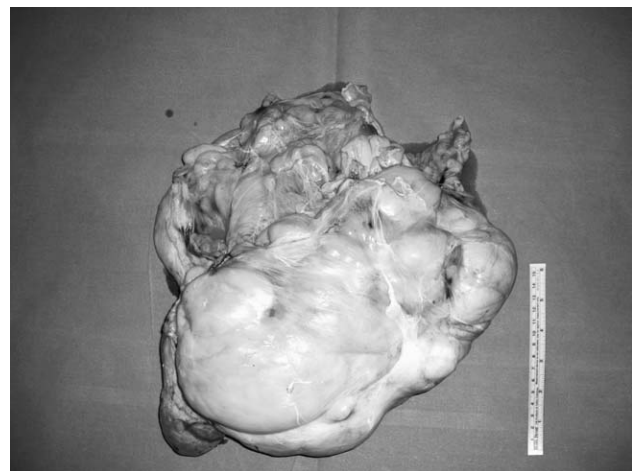


Fig. 3 The tumor presents multiple yellowish-white nodules with rubbery consistency.

Liposarcomas are histologically classified into 4 subtypes (well-differentiated, dedifferentiated, myxoid, and pleomorphic) based on natural history, morphologic features, and cytogenetic alterations.⁶ The so-called mixed-type refers to a small group of liposarcomas with combined features of 2 or more subtypes. Occasionally, well-differentiated liposarcomas contain myxoid stroma and can be misinterpreted as myxoid liposarcomas. Correct diagnosis is critical in such cases owing to remarkable differences in both prognosis and treatment. Indeed, unlike the well-differentiated subtype, myxoid liposarcoma has a high risk of metastasis and is highly sensitive to chemotherapy and radiation. In a recent 14-year case series of 56 liposarcomas with prominent myxoid stroma, 22 (39%) were the well-differentiated subtype, and 11 (20%) arose in the spermatic cord.⁷

Radical orchiectomy with wide local excision is the mainstay of treatment strategies. Long-term follow-up is mandatory due to the high recurrence rate, which reached up to 55% in a 20-year case series of spermatic cord sarcomas.⁸ The benefit of adjuvant radiotherapy in reducing local recurrences is not supported by large-scale studies.

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