CASE REPORT

Liposarcoma of the spermatic cord

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SUMMARY

A 43-years-old male patient presented through general practitioner with a complaint of right scrotal mass and was operated through inguinal approach. A 4 cm mass was excised and was found to be a liposarcoma of the spermatic cord upon histopathology, which is a diagnostic dilemma and very rare entity.

BACKGROUND

Malignant lesions of the spermatic cord are rare. Spermatic cord is an unusual site for presentation of a liposarcoma, with very few cases reported in the literature.^{1 2} Liposarcomas are malignant tumours derived embryologically from mesodermal tissue. Most of these sarcomas present as slow-growing inguinal or scrotal masses. Liposarcoma of the spermatic cord represents about 7% of paratesticular sarcomas.³ Sometimes they present as large scrotal masses mimicking a testicular tumour. Preoperative diagnosis is usually uncommon. The recommended treatment is surgery in the form of wide local excision. Lymph node dissection is usually not recommended as the locoregional lymph nodes are rarely involved. Adjuvant radiotherapy is given only to the cases with positive resection margins. Very late recurrences have been reported, so at least a 10 years follow-up is recommended.^{4 5}

CASE PRESENTATION

A 43-year-old man presented with a right scrotal swelling which had been present for a few months but had started giving him discomfort for past few weeks. The patient was referred for a surgical opinion by his general practitioner with a diagnosis of an inguinal hernia. He was examined in the outpatient department and was found to have a small swelling in the upper part of his scrotum. The testes were examined and a small hydrocele was identified on the right side. All the findings were discussed with the patient and a plan for surgery was made after taking a formal consent of the patient. The patient was admitted for an elective surgery which was performed through an inguinal approach. When the spermatic cord was dissected and isolated, a lipomatous mass (5 cm×4 cm) was identified. The testes were also visualised and were normal upon gross examination. The rest of the cord was normal.

The swelling was excised and sent for histopathology. The histopathological examination revealed a well-circumscribed mass consisting of lobules of mature adipocytes with prominent degenerative

changes. Given the location of the tumour, the appearances are in keeping with an atypical lipomatous tumour/well-differentiated liposarcoma of the cord with clear margins of resection.

OUTCOME AND FOLLOW-UP

The patient was not given any adjuvant treatment and was discussed in multidisciplinary teams where a close follow-up plan was recommended without any further treatment. So he is being followed-up at regular intervals as a surgical outpatient.

DISCUSSION

The first case of sarcoma of the cord was reported by Lesauvage in 1845.^{1 2} Most spermatic cord tumours are benign (80%), but they are usually sarcomas if they are malignant. Most authors agree that sarcomas originate from mesoderm rather than a malignant transformation of a benign lipomatous tissue.⁶

The diagnosis is usually very difficult and is mostly made on histopathology. Clinical assessment may not be accurate and inguinal hernia, hydrocoele and chronic epididymitis are the most common differential diagnoses.⁷ Ultrasonogram cannot provide enough information on paratesticular sarcomas, as some are visualised as homogenous and isoechogenic, others as inhomogeneous and echo-density is quite variable. However, it may help in confirming the consistency of the mass and status of cord and testes. These liposarcomas are usually of a low density and are well-demarcated on CT scan, but there is no pathogenomic feature to differentiate benign from malignant lesions. Use of MRI can provide information on the local extent or distant metastasis, but an exact evaluation of any such mass again cannot be ascertained.

Liposarcoma is a disease of an older age group. They are locally aggressive tumours and their recurrence is very common especially if there is incomplete resection. The patient should be given adjuvant radiotherapy or reoperated upon if resection margins are not histologically free of tumour. For large and suspicious masses a preoperative biopsy or fine needle aspiration cytology should be arranged and then inguinal radical orchidectomy should be performed as the treatment of choice.⁸ Retroperitoneal lymph node dissection is not indicated unless there is evidence of tumour.

Recurrences are managed by surgery or radiotherapy, as role of chemotherapy is very controversial. Long-term follow-up is mandatory as recurrences even after 15–20 years have been reported.⁹

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Learning points

- ▶ Liposarcoma of the spermatic cord is rare. It is usually diagnosed upon histopathology after surgical excision. Since diagnosis is difficult, it is advisable that all surgical specimens be histologically examined.
- ▶ The mainstay of treatment plan should be surgery, however if the margin status is in doubt, adjuvant radiotherapy is indicated. To detect the local relapse, follow-up periods have to be of sufficient duration.

Competing interests None.

Patient consent Obtained.

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