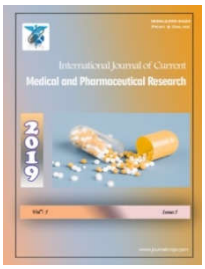
Research Article

INTERNATIONAL JOURNAL OF CURRENT MEDICAL AND PHARMACEUTICAL RESEARCH

ISSN: 2395-6429, Impact Factor: 4.656
Available Online at www.journalcmpr.com
Volume 5; Issue 05(A); May 2019; Page No. 4174-4175
DOI: http://dx.doi.org/10.24327/23956429.ijcmpr201905649



SUBCUTAENOUS SCROTAL LEIOMYOSARCOMA MIMICKING AS SEBACEOUS CYST – CASE REPORT WITH REVIEW OF LITERATURE

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ARTICLE INFO

Article History:
Received 10th February, 2019
Received in revised form 2nd March, 2019
Accepted 26th April, 2019
Published online 28th May, 2019

Key words:

Leiomyosarcoma, scrotum, subcutaneous, sebaceous cyst.

ABSTRACT

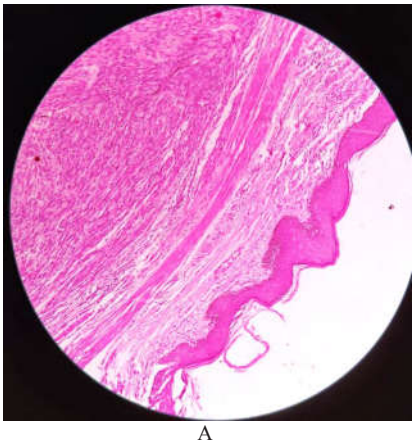
The incidence of subcutaneous leiomyosarcoma of the scrotum is very rare and they encompass a group of paratesticular leiomyosarcomas which account for only 2% of such cases. These tumors are categorized under subcutaneous superficial leiomyosarcomas and they usually do not involve the testis, epididymis or spermatic cord. Only 34 cases have been reported in literature worldwide till now, of which only 11 cases have been reported from India [1]. Considering its rarity, we had an unusual presentation of a 35-year-old male with a nodule over scrotum for 6months duration and was initially diagnosed as sebaeceous cyst on clinical examination. He then underwent excision for the same for which histopathological examination was done, which revealed the features of leiomyosarcoma and the same was confirmed by immunohistochemistry

INTRODUCTION

Soft-tissue sarcomas are rare, malignant neoplasms that arise from mesenchymal tissues; they account for 1% of all adult malignancies. Leiomyosarcoma of the scrotum is a rare genital malignancy with approximately 35 reported cases in literature. Paratesticular leiomyosarcoma originates from testicular tunica (48%), spermatic cord (48%), epididymis (2%) and dartos muscle, as well as subcutaneous tissue of the scrotum (2%) [2]. We report a rare presentation of leiomyosarcoma mimicking as sebaceous cyst on examination to emphasize on considering it as one of the differential diagnosis in arriving at a diagnosis of such tumors.

Case Report

A 35yr old man presented to surgical OPD with a swelling over the scrotum for 6 months duration. The surgeon on examination found a non tender nodular lesion measuring 4.5x3.5cms which was partly fixed to skin. No such similar lesions were noted anywhere in the body. As scrotal region is one of the most common sites for sebaceous cyst, an initial diagnosis of the same was made. Excision biopsy was done and sent for histopathological examination. Gross examination revealed a grey white nodular tumor of hard consistency with foci of haemorrhages. Microscopy revealed ulcerated skin with an infiltrating tumor comprising pleomorphic spindle cells with giant cells and necrosis along with mitotic activity. A diagnosis of leimyosarcoma was made and further IHC was done with desmin and smooth muscle actin to confirm the diagnosis



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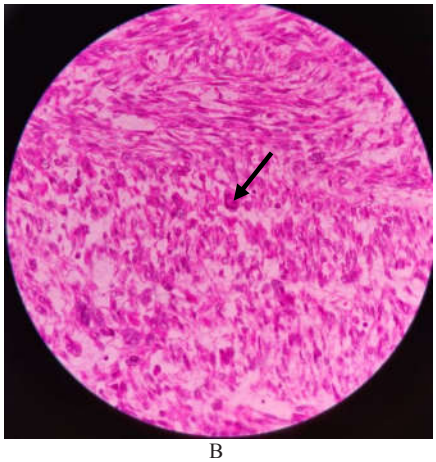

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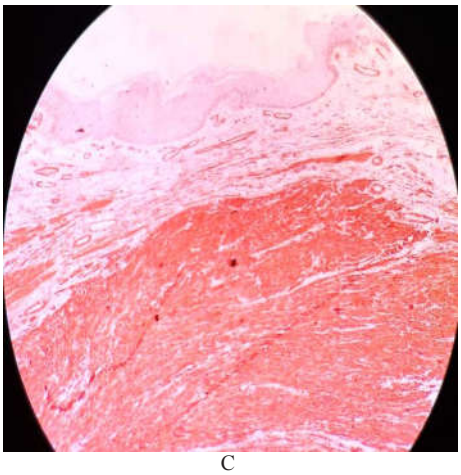

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A] Skin with an infiltrating tumor comprising pleomorphic spindle cells arranged in fascicles. Haematoxylin &Eosin [4x]
B] Pleomorphic tumor cells with multinucleate gaint cells (arrow). Haematoxylin &Eosin [40x]
C] Tumor cells positive for Smooth Muscle Actin in cytoplasm. SMA[4x]

DISCUSSION

Soft tissue sarcomas account for 1% of all malignancies of which leiomyosarcomas constitute 10-20% of soft tissue sarcomas [3]. Subcutaneous leiomyosarcomas account for 1-2% of all superficial soft tissue malignancies. They arise from smooth muscle in the walls of arterioles and veins [4]. Leiomyosarcoma of the scrotum is a rare tumor and was first reported by Johnson H Jr in 1987 [5]. It is mostly diagnosed in the sixth decade, and more than 80% of patients are over 40 years old and is often mistaken for a benign lesion. Differential diagnosis for testicular masses includes testicular torsion, hydrocele, varicocele, spermatocele, scrotal haematoma, epididymitis and testicular tumors. In the present case, it was thought to be a sebaeceous cyst on examination as it was more likely to present in scrotal region. Among the testicular tumors 95% are germ cell in origin (of which 45 % are seminomas, 50 % non-seminomatous germ cell tumours [NSGCT]), 4 % lymphomas, and 1 % other rare histological types [6]. Serum tumor markers (LDH, β-HCG, and α-fetoprotein) help exclude a germ cell tumor. Similar to other testicular tumors of this region, leiomyosarcomas manifest as a painless mass without hydrocele and the disease may be symptomatic in <1 year. Such lesions are best treated by wide local excision and confirmation of the diagnosis is based upon histological examination of biopsy specimen. In the present case histopathology revealed tumor cells arranged in sheets, bundles, and fascicles. Individual cells displayed spindle cell morphology with nuclear pleomorphism and prominent nucleoli. Many multinucleate giant cells were seen with >20mitotic figures /10Hpf. Myxoid change was noted with surrounding hemorrhage and necrosis. The excised margins and skin was free of tumor. No lymphovascular and perineural invasion was seen. As per FNCLCC grading for soft tissue tumors the present case is categorized as Grade 3 tumor in view of nuclear pleomorphism, vascular invasion, tumor depth, and the percentage of tissue necrosis.

On immunohistochemistry, the tumor was positive smooth muscle actin which confirms the smooth muscle origin of the tumor. Presently the patient is asymptomatic and is on regular follow-up post excision.

Prophylactic retroperitoneal lymph node dissection may be performed but no survival benefit has been documented, and hence dissection is recommended only if nodes are suspicious for involvement. Radical orchidectomy can be performed for resectable tumors. However simple excision is insufficient as residual disease was found in 27% of cases that underwent repeat wide excision [7].

CONCLUSION

Leiomyosarcoma of scrotum is rare in incidence and should be considered as one of the differential diagnosis while evaluating such painless scrotal swellings.

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How to cite this article:

Dr Spoorthy Rekha YC and Dr Gale Kathleen (2019) ' Subcutaenous Scrotal Leiomyosarcoma Mimicking as Sebaceous Cyst – Case Report with Review of Literature', *International Journal of Current Medical And Pharmaceutical Research,* 05(05), pp 4174-4175.

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