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A CASE REPORT OF SPINDLE CELL TUMOUR OVER RIGHT KNEE IN MIDDLE AGED INDIVIDUAL

Orthopaedics

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ABSTRACT

Spindle cell tumour is rare tumour affects anywhere in the body with males being more commonly affected1,2. Diagnosis is confirmed with histopathology examination followed by excisional biopsy as a definitive management with and without chemotherapy depending upon site4,5. Here a middle aged female presented with ill defined, soft, mobile swelling associated with dull aching pain without restriction of movements over medial aspect of right knee. On histopathology examination after excisional biopsy found to be spindle cell tumour. On serial follow up patient doesn't developed recurrence and movements over joint was free without any complications.

KEYWORDS

INTRODUCTION

A spindle cell tumour is uncommon tumour, develops in bone or soft tissue. This tumour can develop anywhere in the body without any predisposing factors , but most oftenly is presents after trivial trauma or previous radiotherapy. Most common affected age group is around 40 years with male preponderance. Diagnosis is done by radiological investigations and confirmed with histopathology. Management includes complete excision of tumour with regular follow up at every 3 months. In certain cases chemotherapy is used as treatment.

Case Report

A 34 years old female came to SBMCH OPD with chief complaints of swelling over medial aspect of right knee for past 6 months which was insidious, progressive , dull aching, associated with pain, without aggravating and relieving factors. No history of trauma, numbness, fever, weight loss, or other constitutional symptoms. On local examination a ill defined swelling present over medial aspect of right knee measuring approximately 6X7cm with no visible pulsations or discoloration. Swelling was soft, tender, pinchable, mobile, without fluctuation. Range of movements at knee were normal without neurological or vascular deficit. Preoperative evaluation were done and suspected tumour. Patient was planned examination. The report came as spindle cell tumour.

Clinical Image

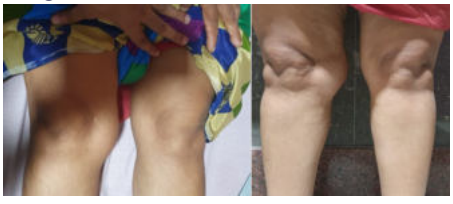


Figure 1a And 1b

Preoperative Xray

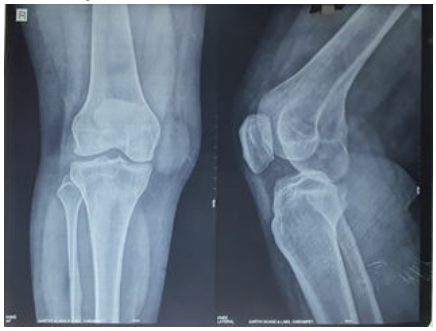


Figure 2: Soft tissue oval lesion seen in the medial aspect of the right knee

Mri

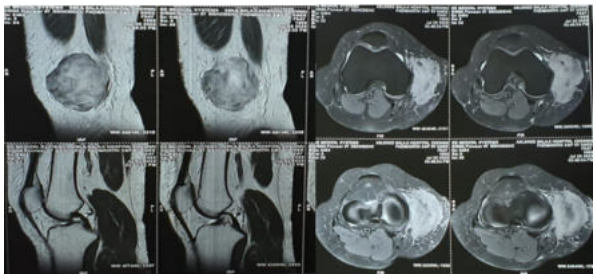


Figure 3a And 3b: Hyperintense lesion showing diffusion restriction and few small foci of blooming noted in the medial aspect of the right Knee

Intraoperative Image

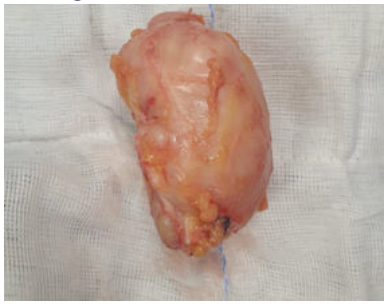
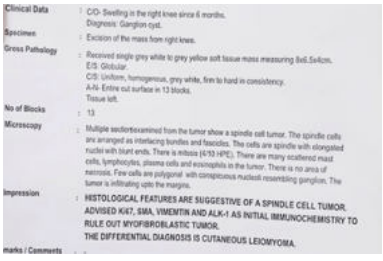


Figure 4: Sample is sent for HPE

Histopathology Report



Clinical Data	C/O- Swelling in the right knee since 6 months. Diagnosis: Ganglion cyst.
Specimen	Excision of the mass from right knee.
Gross Pathology	Received single grey white to grey yellow soft tissue mass measuring 8x6.5x4cm. E/S: Globular. C/S: Uniform, homogenous, grey white, firm to hard in consistency. AAI- Entire out surface in 13 blocks. Tissue left.
No of Blocks	13
Microscopy	Multiple sectorsexamined from the tumor show a spindle cell tumor. The spindle cells are arranged as interlacing bundles and fascicles. The cells are spindle with elongated nuclei with blunt ends. There is mitosis (4/10 HPE). There are many scattered mast cells, lymphocytes, plasma cells and eosinophils in the tumor. There is no area of necrosis. Few cells are polygonal with conspicuous nucleoli resembling ganglion. The tumor is infiltrating upto the margins.
Impression	HISTOLOGICAL FEATURES ARE SUGGESTIVE OF A SPINDLE CELL TUMOR, ADVISED Ki67, SMA, VIMENTIN AND ALK-1 AS INITIAL IMMUNOCHEMISTRY TO RULE OUT MYOFIBROBLASTIC TUMOR. THE DIFFERENTIAL DIAGNOSIS IS CUTANEOUS LEIOMYOMA.
marks / Comments	

Figure 5

DISCUSSION

Spindle cell tumour is rare tumour occurs anywhere in the body commonly over long bones with male preponderance[6,7]. Usually

presents after Previous history of trauma or radiotherapy, rarely presents without any predisposing cause[11,12]. Clinically presents as fibroma or leiomyoma. Early diagnosis of this tumour and appropriate management will prevent the malignant transformation and related complications without affecting the day-day activities of patient.

CONCLUSION

In this case report, we have described a spindle cell tumor located over the knee in a middle-aged individual. Spindle cell tumors are rare entities that pose diagnostic challenges due to their diverse histological features and potential for aggressive behavior. In absence of appropriate expertise or resources, patients do not get adequate treatments in time. This may lead to grave consequences like metastasis or recurrence causing significant problems to the patients. Regular follow-up after treatment with history, physical examination and chest imaging is of utmost importance.

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