

Research Paper—Medical



Dec.-09—Jan.-2010

SYNOVIAL SARCOMA : AN UNCOMMON CAUSE OF LEG SWELLING



*Dr. Vipul Gurjar **Dr. R.P. Bharaney
[M.S.] [M.S.]

*General Surgeon, Asst. Prof. S.B.K.S. Medical College, Pipariya
**General Surgeon, Prof. & Head, S.B.K.S. Medical College, Pipariya

A B S T R A C T

Synovial sarcoma is known as soft tissue sarcoma and it is a rare form of cancer which usually occurs near the joints of the limbs. Here we are presenting a case of young male having leg lump which was investigated and operated for wide excision and later on he advised for post operative above knee amputation and Chemo-Radiotherapy as the histopathology of tumour showed poorly differentiated cells.

KEYWORDS— *soft tissue leg swelling ; malignant tumour ; synovial sarcoma.*

INTRODUCTION:

Synovial sarcomas are malignant tumours of non-epithelial extra skeletal tissue of the body and it accounts for 8% of all soft tissue sarcoma. Primary synovial sarcoma occurs most commonly in the soft tissue near larger joints of limbs but it may involve most human tissue and organs like Brain, Heart and Prostate. These tumours are rare with an annual incidence of around 2-3 /100000 they account for less than 1% of all malignant tumours and 2% of all cancer related death, although in children soft tissue sarcoma represent about 8% of all malignancy. It mainly occurs in 3 rd decades of life of young males. [1,2].

CASE REPORT:

A 22 year old male patient presented with a swelling in upper leg. On examination there was a 6x6 cm, globular, firm swelling near popliteal fossa with normal peripheral pulsation. X-ray of leg showed soft tissue swelling & the bones were normal. Other routine investigations like blood count, chest x-ray, USG abdomen were normal. Patient was operated for wide

excision of lump. Histopathology showed poorly differentiated cells. Later, patient was given advice for above knee amputation and chemo – radiotherapy .

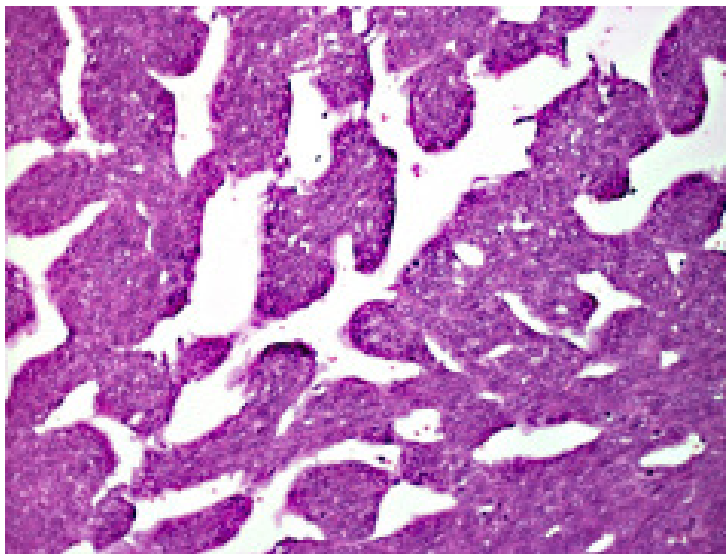


FIG:1: LEG LUMP

FIG:2:EXCISED MASS



FIG:3: HISTOPATHOLOGY (REF. NO-5)



DISCUSSION:

The pathogenesis and risk factors of synovial sarcoma are still unknown though the cells of it have a microscopic appearance similar to that of the synovium giving the disease its name [2]. Two cell types can be seen microscopically, first is fibrous type or spindle cell and the second is epithelial in appearance. The classical Synovial sarcoma has a biphasic appearance with both types present. In poorly differentiated or monophasic variety it consists only of sheets of spindle cells [3]. In more than 80 % of synovial sarcoma the translocation $t(x;18) (p 11;q 11)$ is seen [4]. Surgical wide excision is an important treatment of synovial sarcoma. A tumor free margin of 1-3 cm. is recommended. But when tumor involves neurovascular or deeper plane and the tumour is large enough more than 5cm in size then amputation is the surgery of choice [1, 2, 5]. Adjuvant chemotherapy and neoadjuvant chemotherapy have been proposed for patient with metastatic soft tissue sarcoma [5]. Radiotherapy plays a well defined role in local control of disease as well as when tumour size is large [5]. Synovial cell sarcoma has survival rate of 50-60 % at 5 years and 40-50 % at 10 years. The prognosis depends upon histologic grade, anatomic location and tumor size also [5].

REFERENCE

1. Eilber FC, Dry SM- Diagnosis and management of synovial sarcoma. J Surg Oncol 2008,97(4):314-20.
2. Andrea Ferrari, Paola Collini - Synovial Sarcoma. An ESUN Article in Liddy Shriver Sarcoma Initiative URL: http://sarcomahelp.org/learning_center/synovial_sarcoma.html Accessed September 10th 2009.
3. WB Saunders, Robbins Pathologic Basis of Disease. Seventh Edition. Elsevier Publication.2005.
4. I Fligman, F Lonardo, SC Jhanwar, WL Gerald, J Woodruff and M Ladanyi Molecular diagnosis of synovial sarcoma and characterization of a variant SYT-SSX2 fusion transcript. American Journal of Pathology, 147: 1592-1599.
5. Bernardo Vargas, Mark Clayer - Synovial Cell Sarcoma: Follow-up. J Clin Oncol 2000,18: 3794 ,803.