

# UNDIFFERENTIATED PLEOMORPHIC SARCOMA PRESENTING AS A BELOW KNEE MASS

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## INTRODUCTION

Undifferentiated Pleomorphic Sarcoma (UPS) is a tumor with an uncertain line of origin accounting for  $\leq 5\%$  of all sarcomas, most commonly present in the 6<sup>th</sup> & 7<sup>th</sup> decades of life and occur in extremities, trunk, head and neck.

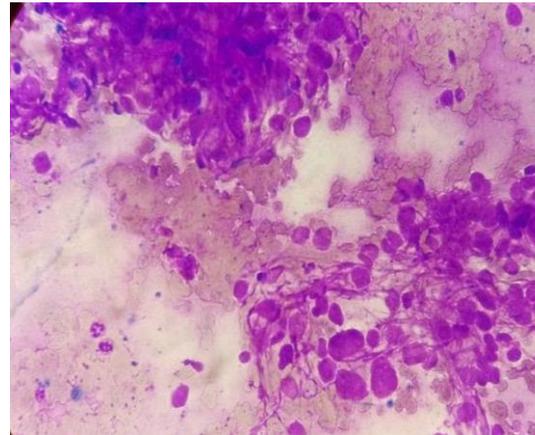
## CASE REPORT

A 46-year old male presented with a painless swelling on anterolateral aspect of left leg below knee for 1 year. Swelling was nodular, firm and non mobile.

## RESULT

On Aspiration smears revealed high cellularity showing highly anaplastic cells, arranged in loose clusters, aggregates and singly dispersed along with extracellular eosinophilic material and thin walled capillaries. Tumor cells showed large hyperchromatic pleomorphic nuclei and moderate amount of cytoplasm, many bizarre shaped nuclei and few multinucleated tumor giant cells also seen (Fig-1). Cytological diagnosis of UPS was made. After surgical excision two nodular yellowish white well circumscribed masses were received (Fig-2). Microscopic examination showed highly pleomorphic cells in vague storiform pattern with many bizarre hyperchromatic nuclei, numerous tumor giant cells with moderate to abundant eosinophilic cytoplasm, high mitotic index with areas of haemorrhage (Fig-3,4).

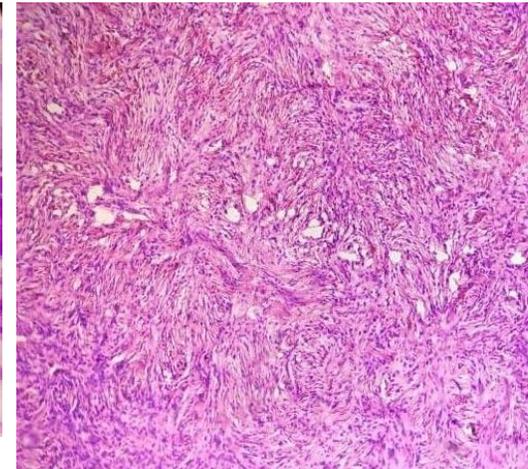
## CYTOPATHOLOGY Fig-1



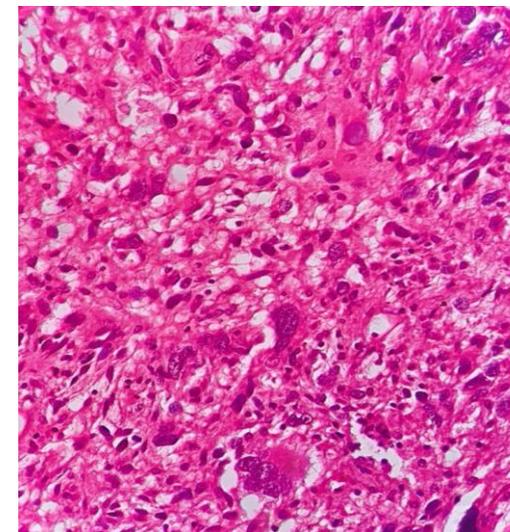
## GROSS Fig-2



## HISTOPATHOLOGY Fig-3



## Fig-4



## DISCUSSION

It was first described in 1964 by O'Brian, and was formerly known as Malignant Fibrous histiocytoma (MFH) is a rare and malignant subtype that lacks specific immunohistochemical markers for a specific lineage of differentiation and are classified as "Undifferentiated Pleomorphic Sarcoma".

## CONCLUSION

These tumors are the fourth most common soft tissue sarcoma and have an incidence of about 0.08-1 per 100,000. Five year survival is 50-60% for all high grade pleomorphic sarcoma. Serial monitoring with imaging studies should be conducted on regular basis to evaluate recurrence or late pulmonary metastasis.

## REFERENCE

- Allen A.H. et al Am J Case Rep, 2019;20:318-322
- Sreenivasan B S et al J NTR Univ Health Sci 2015;4:130-3