



UNDIFFERENTIATED PLEOMORPHIC SARCOMA: A RARE CASE REPORT

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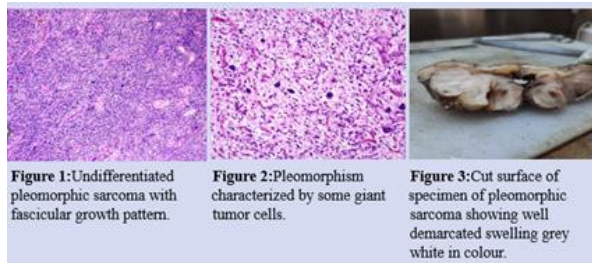
ABSTRACT

BACKGROUND : Undifferentiated pleomorphic sarcoma (UPS), formerly known as malignant fibrous histiocytoma is a rare aggressive soft tissue sarcoma typically occurring in the extremities or retroperitoneum, with a worldwide prevalence of 0.3-0.4 cases per 1,00,000 individuals. Tumor tends to have male predominance more commonly occurring in adults above the age of 50 yrs. It is characterized by a lack of identifiable cell differentiation. UPS can present diagnostic challenges due to its variable presentation and histopathological features, and it often has a poor prognosis due to its high metastatic potential.

KEYWORDS : Pleomorphic sarcoma , Metastatic potential , Poor prognosis

CASE STUDY :

A 63-year-old female presented with a rapidly enlarging, painful mass in the lower back over a period of three months. Clinical examination revealed a large, firm, immobile mass deep within the muscle. Core needle biopsy was performed, tissue was sent in the pathology department.

**RADIOLOGICAL FINDINGS :**

MRI Shows a large heterogenous soft tissue mass in left paraspinal region infiltrating into adjacent paraspinal muscles and subcutaneous tissue with necrotic components, no clear invasion into bone and spinal structure present.

GROSS

Received partially skin covered already cut open specimen of grey white soft tissue mass measuring 8x6x5 cm. Overlying skin measures 8x4 cm, tissue appears partially encapsulated. On further cutting through skin well demarcated swelling noted measuring 7x3x3 cm. Cut surface is soft in consistency and grey white in color.

MICROSCOPY :

Section shows hypercellular tissue comprising of intersecting cart wheel appearance of cells in different pattern along with myxoid and lipomatous tissue. Cells shows hyperchromatic, enlarged nucleus with bizarre pattern and many mitotic figures could be seen.

CONCLUSION :

Undifferentiated pleomorphic sarcoma is a highly malignant tumor with poor prognosis if not diagnosed and treated early. Surgical resection with wide margins is the cornerstone of treatment, often followed by radiotherapy to reduce the risk of recurrence. Long-term follow-up is crucial due to the tumor's high potential for recurrence and metastasis.

DISCUSSION :

Undifferentiated pleomorphic sarcoma represents a diagnostic and therapeutic challenge due to its aggressive nature and lack of specific histological markers. Imaging studies such as MRI can aid in initial evaluation, but definitive diagnosis relies on biopsy and histopathological analysis. Surgical resection with clear margins offers the best chance for local control, though recurrence and metastasis remain significant concerns. In this case, timely intervention with surgery and radiotherapy provided favorable outcomes. Continued surveillance is essential due to the high risk of recurrence, and further research into adjuvant therapies may improve long-term survival rates for UPS patients.

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