IJPRP

Indian Journal of Pathology: Research and Practice
Volume 10 Number 1, January - March 2021
DOI: http://dx.doi.org/10.21088/ijprp.2278.148X.10121.9

Case Report

Soft Tissue Sarcome - A Rare Case Report

Pammy Sinha[1], Manoharan A[2]

[1]Professor and Head, [2]Associate Professor, Department of Pathology, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry 605502, India.

Corresponding Author:
Pammy Sinha, Professor and Head, Department of Pathology, Sri Lakshmi Narayana Institute of Medical Sciences, Puducherry 605502, India.
E-mail: drpsinha@hotmail.com

Abstract

Background: Among the soft tissue sarcomas, Liposarcoma is the second most common malignant tumour in adults1-3. Pleomorphic liposarcoma is a variant of liposarcoma and is characterized by pleomorphic lipoblasts. It occurs more common in males than females2-7.

Case Presentation: A 62 year old Male presented with a mass in the upper 1/3rd of left thigh. Computed tomography showed tumour showing invasion. Biopsy was taken and histopathology revealed Pleomorphic liposarcoma.

Conclusion: Pleomorphic liposarcoma is the rare malignant tumour with high grade as well as high recurrence rate. But the prognosis of this patient is very poor. On the treatment point of view, many mode has been tried but yet the final modality of treatment is still controversial. The histopathological diagnosis revealed the final diagnosis. Hence, any soft tissue mass should not be neglected as benign and to be evaluated for sarcoma.

Key words: Pleomorphic liposarcoma.

How to cite this article:
Pammy Sinha, Manoharan A/Soft Tissue Sarcome - A Rare Case Report/Indian J Pathol Res Pract. 2021;10(1):53–55.

Introduction

Pleomorphic Liposarcoma as name indicates, it is the malignant tumour with pleomorphic lipoblasts. It is derived from mesenchymal tissue and is the common malignant tumour of mesenchymal origin. It can occur in adults and the most common sites are limbs, mediastinum, orbit, liver, and paratesticular region. They can be divided as (i) well-differentiated, (ii) myxoid and (iii) Pleomorphic liposarcoma.[2-8] These tumours are highly invasive and show metastasis.[3,4,7]

Case Report

A 62 year old Male presented with a mass in the upper 1/3rd of left thigh. Computed tomography showed tumour showing invasion. Biopsy was taken and histopathology revealed Pleomorhic liposarcoma.

Gross Examination

Received nodular mass, firm in consistency, which on cut section shows white to yellowish tissue with areas oh necrosis and hemorrhage.

Histopathological Features

Figure 1 & Figure 2 Section studied shows cellular neoplasm composed of spindle to highly pleomorphic cells arranged in fascicles, sheets and focal storiform pattern with plenty of lipobalsts seen. Figure 3 Many multinucleated cells seen

Figure 1 Figure 2

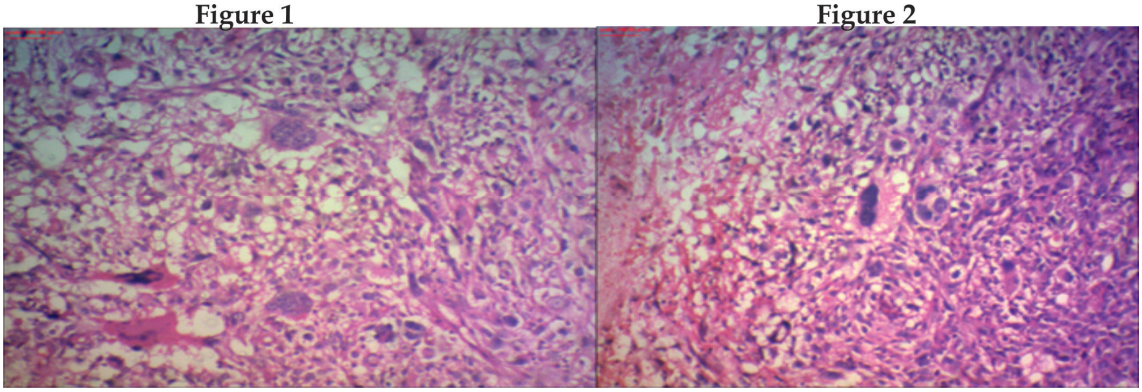

Fig. 1&2: Shows cellular neoplasm with highly pleomorphic cells with lipoblasts seen.

with prominent mitotic figures(10/HPF) including a typical mitotic figures are noted with areas of hemorrhage and necrosis.

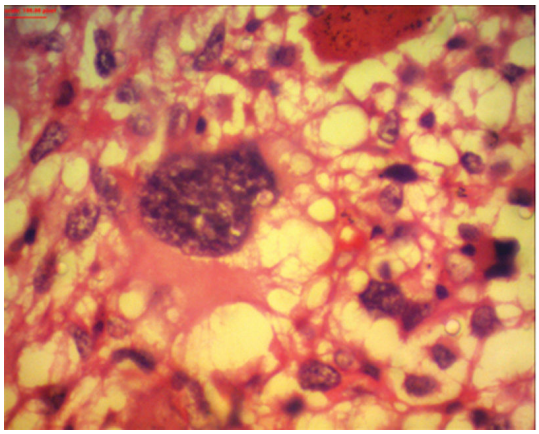

Fig. 3: Shows highly pleomorphic lipoblasts.

Discussion

Among the malignant soft tissue tumours in the extremities, liposarcoma is the most common. But among the liposarcoma, Pleomorphic type is the rare entity among the lipomatous tumours.[6,9-12] Theses tumours are usually silent and cannot be identified as it is a painless tumour unless otherwise it shows rapid growth with massive increase in swelling at a shorter period or it compress the adjacent tissue.[10,11]

These tumours are of highly malignant potential and can show invasion and metastasis.[2-8] The common occurrence is among males when compared to females and usually occur in the fifth or sixth decade.[11-12]

Classification

Based on histopathology, Liposarcoma is divided into 5 types as per WHO;

1. Well differentiared liposarcoma,
2. Myxoid liposarcoma,
3. Round cell,
4. Dedifferentiated and
5. Pleomorphic liposarcoma.

The important differential diagnosis is malignant fibrous histiocytoma with multinucleated giant cells.[9-12] In the present study, the site of pleomorphic liposarcoma is from the upper 1/3rd of left thigh which is the most common site of these lesion.

Conclusion

Pleomorphic liposarcoma is the rare malignant tumour with high grade as well as high recurrence rate. But the prognosis of this patient is very poor. On the treatment point of view, many mode has been tried but yet the final modality of treatment is still controversial. The histopathological diagnosis revealed the final diagnosis. Hence, any soft tissue mass should not be neglected as benign and to be evaluated for sarcoma.

References

1. Enzinger FM, Winslow DJ. Liposarcoma: a study of 103 cases. Virchows Arch Pathol Anat 1962;335:367–88.
2. Rudzinski E, Mawn L, Kuttesch J, et al. Orbital pleomorphic liposarcoma in an eight-year-old boy. Pediatr Dev Pathol 2011;14: 339–44.
3. Miura JT, Charlson J, Gamblin TC, et al. Impact of chemotherapy on survival in surgically resected retroperitoneal sarcoma. Eur J Surg Oncol 2015;41:1386–92.
4. Rosai J, Akerman M, Dal Cin P, De Wever I, Fletcher CDM, Mandahl N, et al. Combined morphologic and karyotypic study of 59 atypical lipomatous tumors. Evaluation of their relationship and differential diagnosis with other adipose tissue tumors (a report of the CHAMP

study group). Am J Surg Pathol 1996;20:1182–9.

5. Evans HL. Liposarcomas and atypical lipomatous tumours: a study of 66 cases followed for a minimum of 10 years. Surg Pathol 1988;1:41–54.
6. Rekhi B, Navale P, Jambhekar NA. Critical histopathological analysis of 25 dedifferentiated liposarcomas, including uncommon variants, reviewed at a Tertiary Cancer Referral Center. Indian J Pathol Microbiol 2012;55:294-302.
7. Nascimento AG. Dedifferentiated Liposarcoma. Semin Diagn Pathol 2001;18:263-6.10. Dei Tos AP. Liposarcoma. New entities and evolving concepts. Ann Diagn Pathol 2000;4:252-66.
8. Mentzel T, Bosenberg M, Fletcher CDM. Pleomorphic liposarcoma: clinicopathologic and prognostic analysis of 31 cases. Mod Pathol 1999;12:55A.
9. Shmookler BM, Enzinger FM. Pleomorphic lipoma: a benign tumor simulating liposarcoma. A clinicopathologic analysis of 48 cases. Cancer 1981;47:126–33.
10. Enzinger FM, Weiss SW. Liposarcoma. In: Soft tissue tumors. 3rd ed. St Louis, MO: Mosby; 1995. p. 431–66.
11. S. Singer, C. R. Antonescu, E. Riedel, M. F. Brennan, and R. E. Pollock, "Histologic subtype and margin of resection predict pattern of recurrence and survival for retroperitoneal liposarcoma," Annals of Surgery, vol. 238, no. 3, pp. 358–371, 2003.
12. Azumi N, Curtis J, Kempson RL, Hendrickson MR. Atypical and malignant neoplasms showing lipomatous differentiation: a study of 11 cases. Am J Surg Pathol 1987;11:161–83.