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RESEARCH ARTICLE

BENIGN FIBROUS HISTIOCYTOMA, RARE PRESENTATION: A CASE REPORT

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ABSTRACT

Benign fibrous histiocytoma is such a rare tumour of which only a few cases have been reported in the literature. We herein report such a case, describing the clinical characteristics of the lesion, complete diagnostic evaluation and treatment. Diagnostic histopathological slide images are also illustrated.

INTRODUCTION

The benign fibrous histiocytoma (BFH) is a mesenchymal tumour that has been described as a benign neoplasm composed of fibroblasts and histiocytes arising in the cutaneous soft tissues[1]. Because of the confusion over the natural history of fibrohistiocytic lesions, BFH was not identified as a separate clinical entity until the 1960s[2]. Cutaneous BFH commonly originates in sun-exposed skin. This is a condition usually seen in canines but on a rare occasion was presented to us.

Case Report

A 35-year-old man carpenter by occupation came to the Surgery out patient department with chief complaints of painless slowly growing nodular lesion since 10 years. These were large 'bump-like' swellings. On further examination, the swelling was firm in consistency, non tender, non inflammatory, mobile, three in number, 1 located over the sacral region and 2 over the buttocks near the peri-anal region. Size of the lump over the sacral region was 3.5cm X 2cm X 1.5cm, and on the buttocks were measuring 6 cm X 4cm X 2.5cm, 5.5cm X 3.5cm X 2.5cm.

Summary of investigations

Haemoglobin-11.9 gm%, Total leukocyte count- 6500 mm^3 and differential leukocyte counts were normal. Ultrasonography of abdomen and pelvis was normal except for left renal cortical calcification.

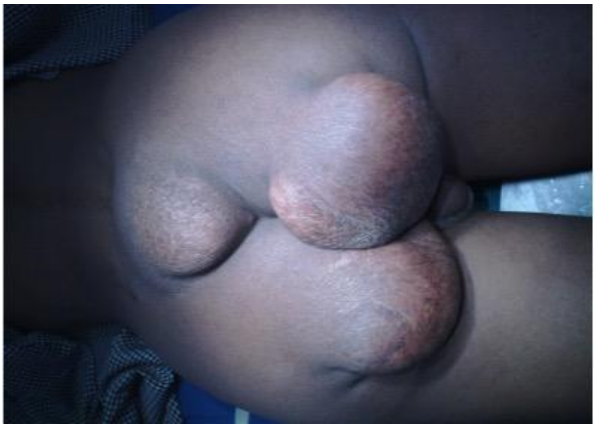

Figure 1

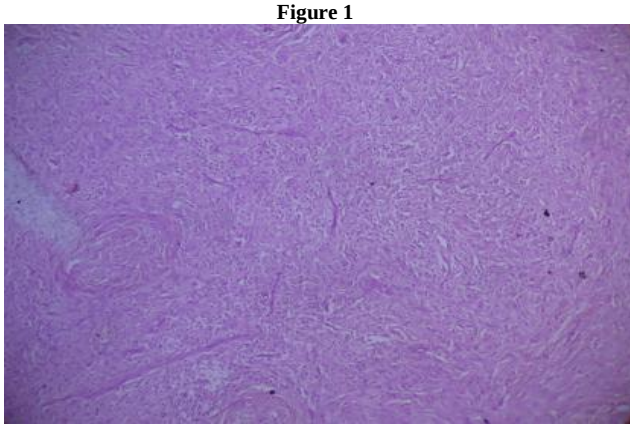

Figure 2

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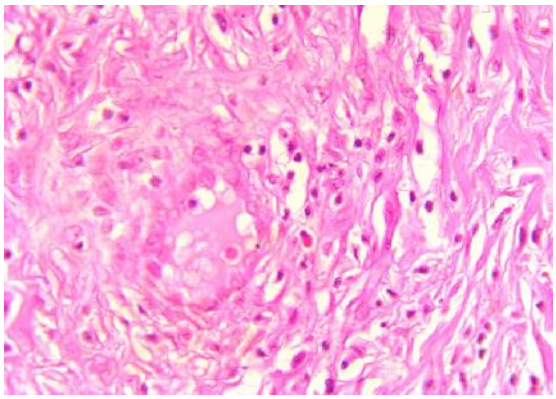

Figure 3

Microscopic examination showed short, intersecting fascicles of fibroblastic cells. The fascicles were arranged in vague storiform pattern. It was admixed with rounded foamy histiocytic cells[Figure 2]. Touton type of giant cells and few inflammatory cells were also present [Figure 3].

CD34 [figure 4] negative and CD68 [figure 5] positive Immunostain helped rule out its malignant counter part, dermatofibrosarcoma protuberans.

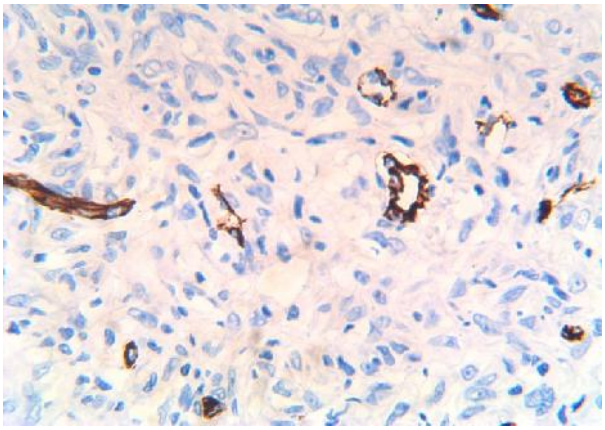

Figure 4

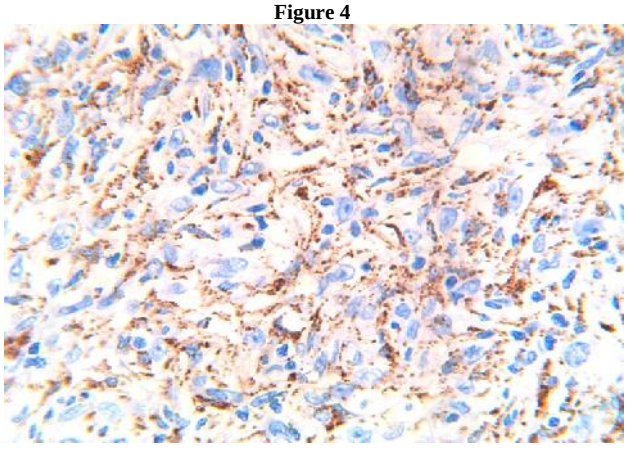

Figure 5

DISCUSSION

Until recently the term fibrous histiocytoma (FH) referred to both benign and malignant neoplasms. The differential diagnosis between the two entities was often difficult [3] .The so-called malignant FH is not a definable entity but instead represents a wastebasket of undifferentiated pleomorphic sarcomas accounting for no more than 5% of adult soft tissue sarcomas. Although retained in the 2002 WHO classification of soft tissue tumours, it has long been recognized that these tumours have no relationship to true histiocytes [4]

Histopathologically, BFH typically shows a biphasic cell population of histiocytes and fibroblasts [5] . In some cases the cells resemble myofibroblasts, primitive mesenchymal cells, and cells having intermediate or mixed features. The presence of a homogeneous population of fibroblast-like cells has also been described [2] . Our case showed biphasic population with predominance of fibroblast-like spindle cells. Other histological features frequently described in BFH are the presence of multinucleated giant cells, abundant vascularity, and inflammatory infiltrate[2] .

The treatment of choice is the complete resection of tumour, with an excellent prognosis and recurrence rate of almost zero [6] [7].

The prognosis of BHF is excellent. The results of this study support local excision as definitive treatment of BHF of cutaneous tissue. When pathologically clear margins are found, the incidence of local recurrence is unlikely. Incomplete excision or enucleation may result in significant percentage of recurrence [8] . Radiation therapy and chemotherapy have currently no role in the management of BHF.

Fibrohistiocytic tumors originate from tissue histiocytes, some of which were said to acquire fibroblastic features. They arise from primitive mesenchymal cells and have the capacity for dual differentiation into histiocytes and fibroblasts. Cytogenetic studies have shown these tumors to be clonal but few arguably consider it to be a reactionary proliferation.

CONCLUSION

We reported the clinical and microscopic aspects of a case of BHF of the cutaneous soft tissue. Although rare, BHF must be considered in the differential diagnosis of other soft tissue tumours,

A thorough knowledge of this lesion is important, which will provide the primary management of this rare lesion.

References

1. T.-C. Chen, T.-T. Kuo, and H.-L. Chan, “Dermatofibroma is a clonal proliferative disease,” *Journal of Cutaneous Pathology*, vol. 27, no. 1, pp. 36–39, 2000.
2. S. Bielamowicz, M. S. Dauer, B. Chang, and M. Zimmerman, “Noncutaneous benign fibrous histiocytoma of the head and neck,” *Otolaryngology: Head and Neck Surgery*, vol. 113, no. 1, pp. 140–146, 1995.
3. F. Femiano, C. Scully, G. Laino, and G. Battista, “Benign fibrous histiocytoma (BHF) of the cheek: CD 68-KP1 positivity,” *Oral Oncology*, vol. 37, no. 8, pp. 673–675, 2001.

4. C. D. M. Fletcher, "The evolving classification of soft tissue tumours: an update based on the new WHO classification," *Histopathology*, vol. 48, no. 1, pp. 3–12, 2006.
5. E. Calonje, T. Mentzel, and C. D. M. Fletcher, "Cellular benign fibrous histiocytoma: clinicopathologic analysis of 74 cases of a distinctive variant of cutaneous fibrous histiocytoma with frequent recurrence," *American Journal of Surgical Pathology*, vol. 18, no. 7, pp. 668–676, 1994.
6. V. G. Prieto, J. A. Reed, and C. R. Shea, "Immunohistochemistry of dermatofibromas and benign fibrous histiocytomas," *Journal of Cutaneous Pathology*, vol. 22, no. 4, pp. 336–341, 1995.
7. V. G. Prieto, J. A. Reed, and C. R. Shea, "Immunohistochemistry of dermatofibromas and benign fibrous histiocytomas," *Journal of Cutaneous Pathology*, vol. 22, no. 4, pp. 336–341, 1995.

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