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RESEARCH ARTICLE

BENIGN FIBROUS HISTIOCYTOMA OF THE CHEEK-A CASE REPORT

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ABSTRACT

Case report: A 34 year old male patient presented with a painless swelling on the left side of the cheek. Detailed history was taken, clinical examination done, FNAC of the swelling was done and patient was subjected to Plain CT scan of the Face and paranasal sinus, which revealed a subcutaneous soft tissue swelling over the left maxilla.

Discussion: Benign fibrous histiocytoma is a rare entity in clinical practice. It usually presents as a benign superficial swelling, it can arise from any part of the body. We are presenting a case of Benign fibrous histiocytoma of the cheek in a middle aged male patient. Excision of the swelling was planned, the swelling was excised under general anaesthesia. The swelling was subjected to histopathological examination which revealed the diagnosis of Benign fibrous histiocytoma.

Conclusion: Benign fibrous histiocytoma is a pathological diagnosis, surgical excision is the treatment of choice and it has very good prognosis.

INTRODUCTION

Benign fibrous histiocytoma is a very common benign indolent tumour of the adults.¹ Benign fibrous histiocytoma are of 2 types cutaneous and non cutaneous types and fibrohistiocytic tumours of the bone is also described.^{2,3,4} Here we are reporting a case of benign fibrous histiocytoma of the cheek in a middle aged, male patient.

Case Report

A 34 year old male patient presented to the ENT out patient department with the history of swelling on the left side of the cheek, it was noticed by him about 8 months ago, it was initially small in size and had progressively increased in size to involve the left infra orbital margin, the swelling was not associated with pain or discoloration. On examination, a swelling measuring about 6x 5 cms was seen on the zygoma on the left side, well circumscribed, mobile, non tender, firm to hard in consistency, skin over the swelling was normal and pinchable [fig 1]. Examination of the oral cavity was normal. No palpable lymph nodes in the neck. Systemic examination was normal.

FNAC of the swelling showed spindle cells with plump to elongated nuclei suggestive of fibrohistiocytic tumour.[fig 2].

CT Scan showed a well defined soft tissue lesion measuring 5 x 4 cms without infiltration into the surrounding tissue suggestive of a superficial soft tissue tumor. [fig 3&4]

Patient was subjected to all the relevant pre operative investigations, all the investigations were within normal limits. Excision of the swelling was planned and patient was posted for surgery under general anaesthesia, after intubation patient placed in supine position with left cheek up, part painted and draped.

A horizontal incision measuring about 6 cms placed along the bony prominence of the left infra orbital margin, superior and inferior skin based flaps were elevated and the swelling exposed, it was a firm swelling within the dermal layer of the skin sitting over the zygoma, dissection was done all around the swelling and the swelling was excised, skin incision was closed in layers, and subcuticular suture was placed over the skin, pressure bandage applied. The specimen was sent for histological examination[fig 5]. Patient extubated, post operative period uneventful. Patient was discharged after 4 days. Patient was followed up for 9 months, is asymptomatic.

Histopathological examination

Gross appearance: The tumour tissue is firm, grey-white, containing irregular yellow to reddish brown foci.

Microscopy: Consists of a stroma of spindle-shaped fibroblasts, arranged, focally, in a whorled, storiform pattern, among which a variable number of small, multinucleated. The spindle cell nuclei may be dark, thin and elongate, or round to oval and vesicular with a micronucleolus. [fig 6]

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Fig 1 soft tissue swelling left cheek lateral view



Fig 4 3D reconstruction image of left cheek swelling

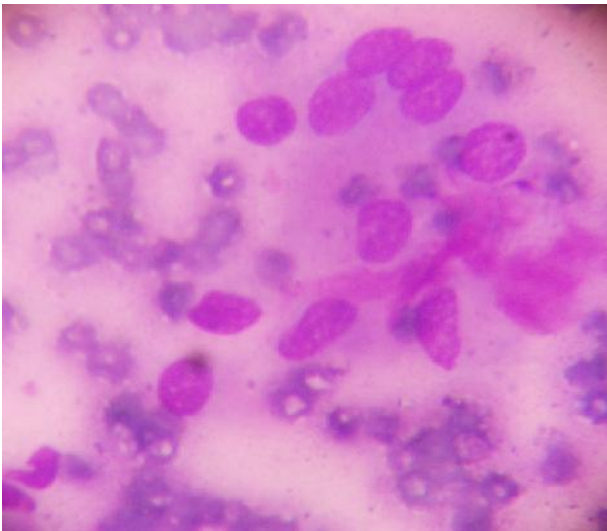


Fig 2 FNAC of the lesion showing spindle cells with plump to elongated nuclei(Giemsa stain 40X)



Fig 5 Intra-operative picture

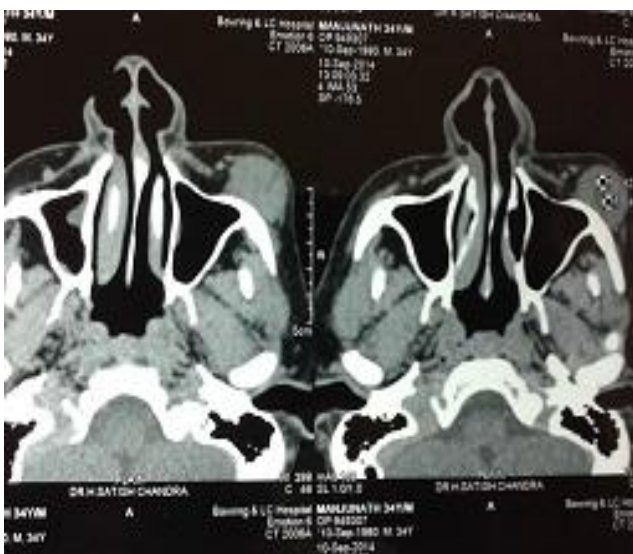


Fig 3 CT scan showing soft tissue swelling in left cheek in the subcutaneous plane

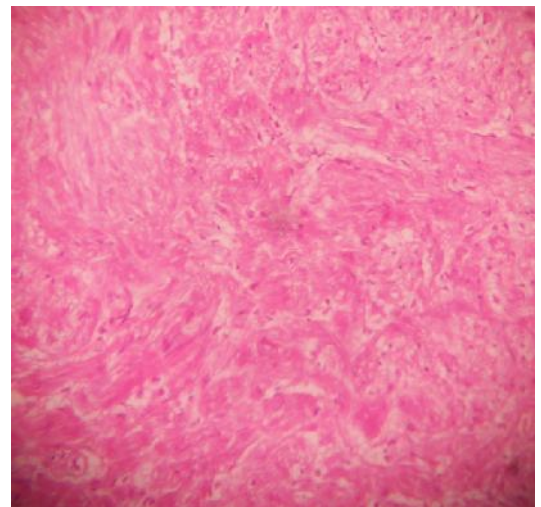


Fig 6 histopathology of the lesion showing stroma of spindle-shaped fibroblasts, arranged, focally, in a whorled, storiform pattern.(H&E 10X)

DISCUSSION

Fibrous histiocytomas are divided into benign and malignant subgroups. It was first defined by Dahlin in 1978.¹ These neoplasms should be differentiated from the malignant FH, which frequently has a rather aggressive malignant course. The diagnosis of FH may be difficult clinically when the lesion is located in the deep tissues, and is frequently confirmed after local excision. Benign fibrous histiocytoma is more of a histological diagnosis rather than a clinical one. Histopathologically, this tumour is a neoplasm of histiocytic origin and is composed of a biphasic cell population of histiocytes and fibroblasts. This accounts for the dual population of histiocytic and fibrous elements commonly seen in this tumour.⁵ Histological examination has rare mitosis, absence of cellular atypia and immunohistochemistry patterns has high positivity for vimentin, CD38, factor XIIIa.^{2,4} The differential histological diagnosis includes the neurofibroma: this tumour is identified by positivity of S-100 protein.⁶ Some leiomyosarcoma are diagnosed incidentally when presumed BFH are removed.¹ Another lesion that can be differentiated from the BFH is dermatofibroma, so-called atypical-BFH.⁷

This tumour has been associated with a previous trauma, sun exposure, and chronic infection, rather suggesting that it represents a reactive proliferation of benign cells. Benign FH of the non-cutaneous soft tissues of the head and neck most often develops as a painless mass with specific symptoms caused by interference with the normal anatomy and physiology of the area in which they arise.⁸ Most lesions are treated by local surgical excision without sacrificing structures that would cause major functional or cosmetic morbidity. In our patient, the swelling was situated in the peri-orbital area, due care was taken as to not cause orbital trauma, the swelling with well defined and was excised with clear cut margins.

These lesions have no metastatic potential and generally have good prognosis. Of the cases with follow-up reported in the literature, only 2 (11%) out of 18 had a recurrence after a local excision¹, our patient is asymptomatic, after 8 months of follow up. The reason for these recurrences is unknown, as is the adequacy of the margins of resection is usually clear of the lesion.

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If the surgical margins were reported to be free of tumour, local recurrences were uncommon. Radiation therapy and chemotherapy have no role in the management of benign FH.

CONCLUSION

Benign fibrous histiocytoma is a histopathological diagnosis, has a very good prognosis with surgical excision being the treatment of choice.

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