JOURNAL OF KING ABDULAZIZ UNIVERSITY Medical Sciences



فچلاق جامعة الملك عبدالعزيز العلوم الطبية

06 May 2001

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RE: MS-07-0501 "Hemangioma of the Frontal Sinus."

Dear Dr. Jamal:

Thank you very much for submitting the above-titled manuscript. I am pleased to inform you that your manuscript has been accepted for publication in the JKAU-Medical Sciences. You are going to receive the actual proof of the above in due course and we will let you know about the date of publication of your article.

I take this opportunity on behalf of the Editorial Board to thank you for your contribution to the publication of JKAU-Medical Sciences.

Yours sincerely,

Editor-in-Chief

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FIRST CLINICAL RECORD

HAEMANGIOMA OF THE FRONTAL SINUS

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ABSTRACT:

Haemangioma of the frontal sinus was not reported in the English literature until now.

In this paper I am reporting the first case of lobular capillary haemangioma of the right frontal sinus which was treated by surgical excision. Nine months after surgery, there is no evidence of recurrence clinically. The literature on the topic was reviewed.

Key Words: Haemangioma, Capillary, Frontal sinus.

INTRODUCTION:

Although haemangiomas are common lesions of the head and neck, those of the nasal cavity and paranasal sinuses are ${\rm rare}^{(1)(2)}$. A review of the English literature until 1997 revealed only 33 cases of maxillary sinus haemangioma. I am reporting in this paper the first case of lobullar capillary haemangioma of the right frontal sinus in 9 years old Saudi boy.

CASE REPORT:

A 9 years old saudi healthy boy presented to my clinic in August 1999 with a two months history of swelling in the superomedial wall of right orbit. No eye or any ENT complaint was associated with this swelling. His past medical history was unremarkable.

On examination, both ears, nose and throat were normal.

There was a hard swelling about 1 X 1.5 cm. in the superomedial wall of the right orbit. It is not tender. The skin over it was free and healthy. General examinations and routine investigation were normal.

A computed tomographic "C.T." scan without contract "figure I" showed features of slowly growing benign looking expansile lesion mostly in the location of the right frontal sinus with downward remodeling of the bony roof of the right orbit.

These features are highly suggestive of frontocoele of the right frontal sinus and less likely of epidermoid regarding its location, patient's age and sex. The orbit itself is essentially free apart from remodeled roof.

Complete removal of the lesion was performed through external approach. I did my incision about 1.5 cm. long just beneath the medial end of the eye brow like the operation of trephining the frontal sinus (figure 2). I cut through skin, subcutaneous tissue and periostem. The periostem then elevated from the bone of the floor of the frontal sinus. The remodeled bone of the floor of the frontal

sinus was thin and easily removed by a small gauge and hummer. After I opened the mucosa of the frontal sinus, bleeding started and I controlled it by packing with gauze soaked in decongested nasal gel. Then I inspected the frontal sinus by 0^0 4 mml. sinuscope. The lesion was covering the floor of the sinus and its lateral wall. I remove this vriable-bleeding lesion by curette and suction until I cleaned it using the sinoscope. During the surgery the lesion bled freely but after complete removal by curretage and packing with gauze soaked in decongested nasal gel several times the bleeding stopped. The wound closed with drain . The drain continues to ooze serosanguinous secretion for five days. On the sixth postoperative day, the drain was removed. Two stitches removed with the drain and the last stitch removed one day later.

The microscopic appearance of the lesion "figure 3 A and B" showed a piece of very vasular tissue with lobulated pattern and large areas of haemorrhage in the center. These features are consistent with benign vasular tumor (Lobular Cappillary Haemangioma). Scatered calcified or dense hyaline acellular structure simulating psammoma bodies are seen in the fibrous septae between the lobules. No mitosis seen. No cell anaplasia is present.

Nine months after surgery, the patient remained healthy and free of the disease.

I asked for C.T. scan but unfortunately, the patient did not do it and disappeared.

DISCUSSION:

Haemangiomas are common lesions especially in childhood. They have several clinical and histological varieties. Capillary haemangiomas usually arise from skin or mucous membranes. The lesions ranges from 1-2 mm to several centimeters. Haemangiomas are benign vasular lesion ⁽³⁾. The majority of haemangioma presented in the head and neck area. Although the histological findings of all of them are similar with only minor variations, their clinical features, management and prognosis are different according to their location ⁽⁴⁾. Therefore, the classic histological classification in capillary, cavernous and mixed haemangiomas has no clinical relevance ⁽⁵⁾.

It has been reported that over 20% of the benign non-ephithelial tumours involving the nasal cavity, paranasal sinuses and nasopharynx are capillary haemangiomas ⁽⁶⁾.

I planned my surgery to excise a frontal mucocele, but after I opened the right frontal sinus, I found vasular mass which was easily removed down to the periostium with suction and curretage. The bleeding was controlled by packing and drain left in place.

This is the first case of frontal sinus capillary haemangioma.

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الورم الوعائي الدموي في الجيب الانفي الجبهي

تقرير عن أول حالة

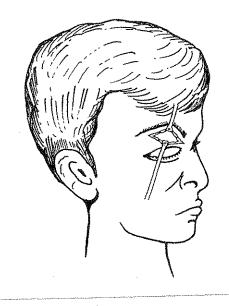
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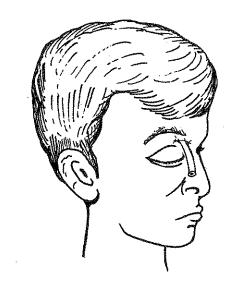
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هذه حالة ورم وعائى دموى فى الجيب الانفى الجبهى الايمن فى طفل سعودى عمره تسع سنوات وهى أول حالة فى المراجع الانجليزية حتى الآن ،عولجت الحالة بالاستئصال الجراحى وبعد تسعة أشهر من الجراحة لم يكن هناك عودة للورم ،وقد روجع ما نُشر عن هذه الاورام فى الجيوب الانفية



Figure 1. C.T.scan without contrast showing the features of slowly growing benign looking expansile lesion in the location of right frontal sinus with remodeling of the bony roof of the right orbit.





A



Figure 2. A. The site of the incision as a diagram.

B. Photogragh of the patient on the first postoperative day.

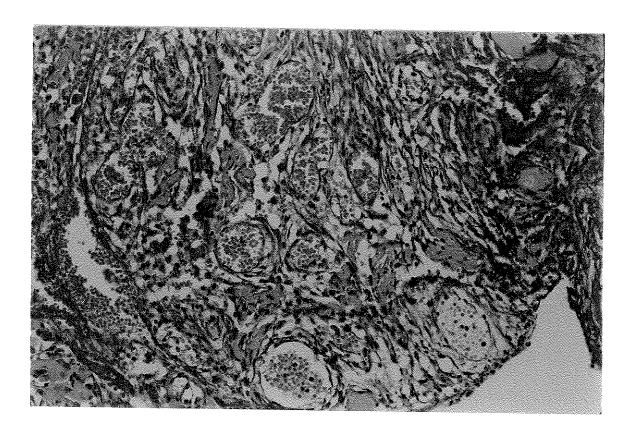


Figure 3 A. High power view showing proliferating spindle cells and formation of variable size capillary channels filled with blood.

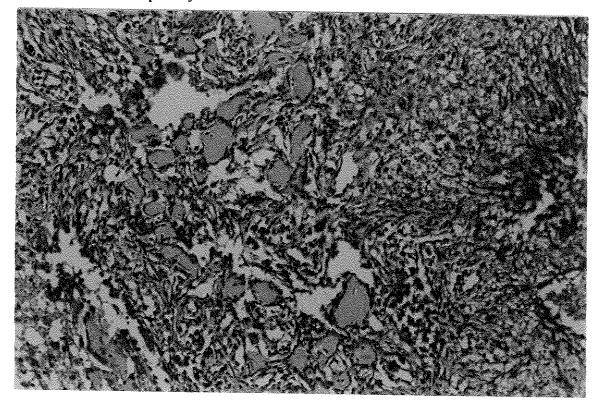


Figure 3 B. Inter mediate power view showing spindle cell proliferation with small channels filled with blood. Scattered hemosidren is seen.