

Giant Haemangioma Of The Scalp - A Case Report

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Key words : - Haemangioma, Scalp, Calvaria.

INTRODUCTION

Haemangiomas are commonest benign vascular tumors. They can occur in any tissue but are especially common in the skin. The deeper soft tissue haemangiomas may involve any soft tissue, such as muscle, tendon, connective tissue, fatty tissue, synovium or bone. Massive enlargement and extension across tissue planes is very uncommon [1,2]. We present a rare case of a giant haemangioma of the scalp with erosion of the underlying calvaria and intracranial extension. The rarity of this lesion prompted us to report the same.

CASE REPORT

A 50 year old female presented with a history of huge midline swelling over the parieto-occipital region for the past 15 years. The swelling was small to begin with and progressively increased in size. There were no other significant complaints. On examination, a huge 15 x 8 cms midline swelling was seen in the parieto-occipital region. The swelling was firm, non-tender and immobile. The skin over the swelling was stretched. Routine laboratory examination was normal.



Fig 1. Lateral Skull Radiograph shows a huge soft tissue mass with areas of calcification in the parieto-occipital region with complete erosion of the underlying skull bone.

A plain radiograph of the skull was taken. The radiograph (Fig. 1) showed a huge soft tissue mass with areas of calcification in the parieto-occipital region in the midline. The underlying bone showed complete erosion of both the inner and outer tables. Subsequently the patient underwent a CT examination (Toshiba TCT-300 scanner). The scan showed a huge, intensely enhancing mass in the high parietal region with intracranial extension (Fig 2, 3). Bone window of the same (Fig 4) revealed complete erosion of the parietal bone underlying the swelling. A CECT through the swelling (Fig 5) showed areas of necrosis and calcification within the swelling. The histopathology of the lesion was consistent with the diagnosis of Haemangioma.

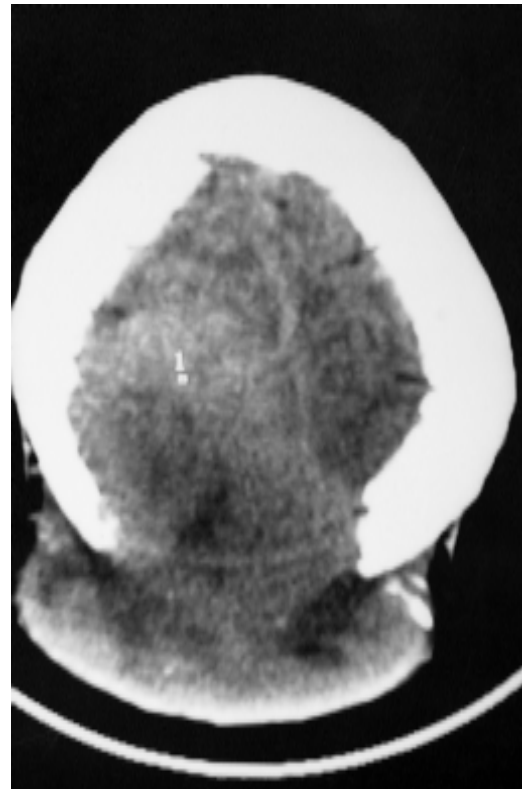


Fig 2. Axial NECT shows a well-defined soft tissue mass in the high parietal region with intracranial extension.

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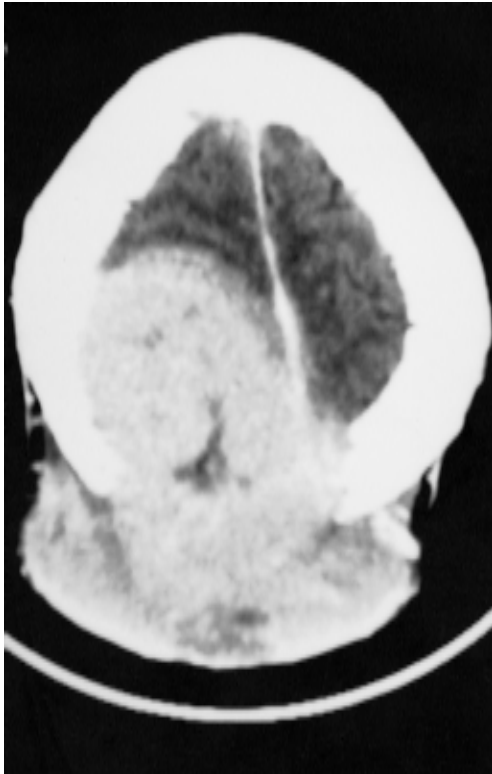


Fig 3. CECT at the same level shows intense homogenous enhancement of the mass.

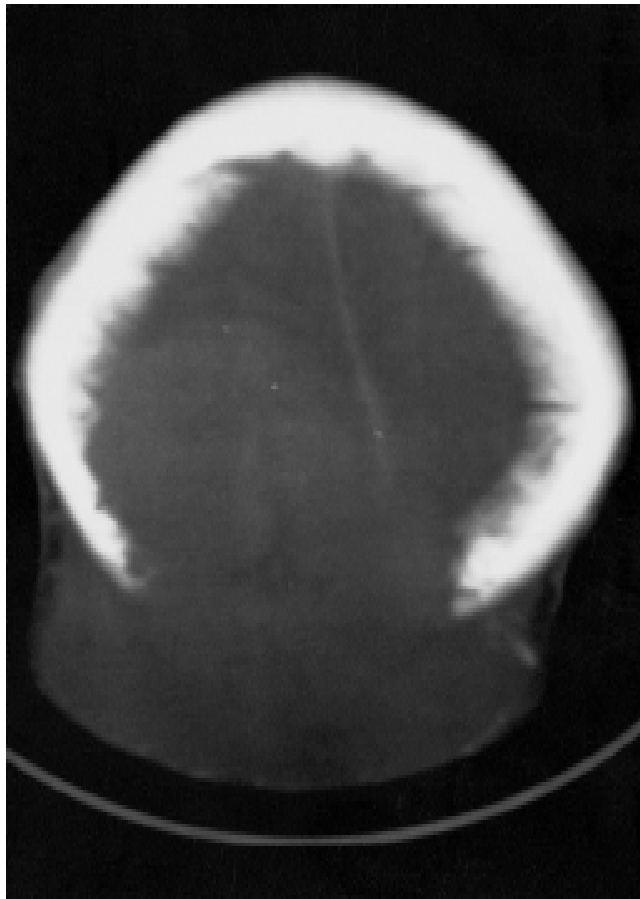


Fig 4. Bone algorithm of the same shows complete erosion of the underlying parietal bone.

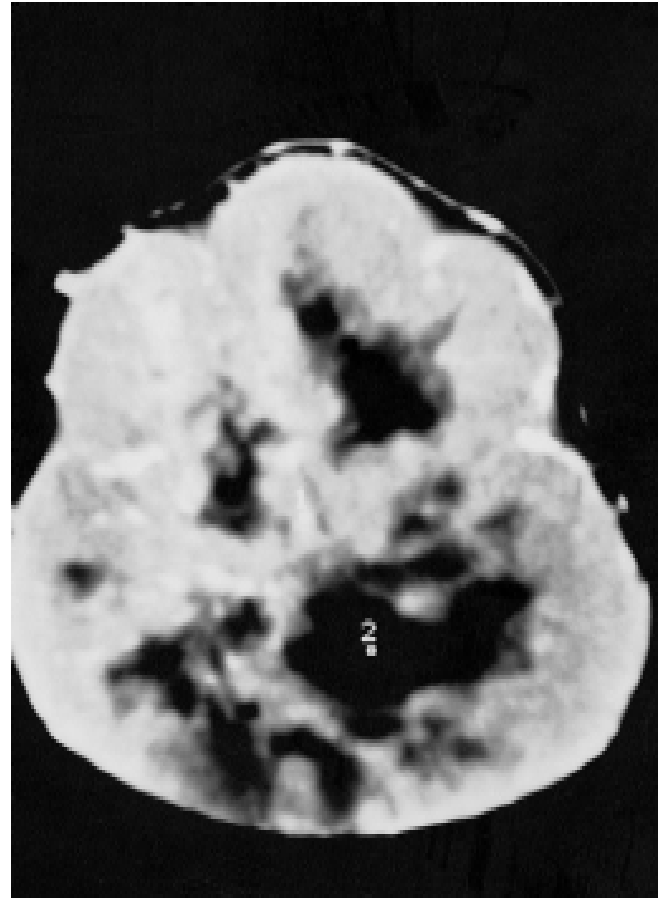


Fig 5. Axial CECT scan through the mass demonstrates non-enhancing hypodense areas within the intensely enhancing mass representing cystic degeneration. Also note calcifications within the lesion.

DISCUSSION

Haemangiomas are the commonest benign vascular tumors. They can occur in any tissue but are especially common in the skin, where they usually are seen at birth or within the first several years of life. The deeper soft tissue haemangiomas may involve any soft tissue, such as muscle, tendon, connective tissue, fatty tissue, synovium, or bone [3,4]. They are classified histologically by the predominant type of vascular channel in the lesion: capillary, cavernous, venous and arteriovenous. A capillary haemangioma is composed solely of capillaries. If the capillaries are widely dilated, the tumor is called a cavernous haemangioma. If a vascular tumor has thicker walls and contains smooth muscle cells, it is called a venous haemangioma. The arteriovenous haemangioma is composed of abnormal communications of arteries and veins from persistence of the fetal capillary bed [3,5].

The haemangioma manifested as a soft tissue mass may be characterized as a poorly circumscribed, localized or diffuse swelling on gross inspection. These tumors vary in size from less than 4 cm to over 20 cm, but most are less than 9 cm in diameter. Plain radiographs may reveal

soft tissue mass with calcifications. Calcification within the haemangioma is common and may be of three types. The nonspecific type is either amorphous or, at times, curvilinear. The second type, which is more specific and is the most frequent type of calcification, is the phlebolith. Phleboliths are rounded calcific masses frequently demonstrating a laminated structure. Occasionally, metaplastic ossification may be found in haemangiomas, and this is the third type of calcification [3].

Nonenhanced CT usually shows a mass isodense with adjacent muscles with intense enhancement after intravenous contrast administration. Ultrasound shows a complex mass with calcifications and Doppler arterial signal with low resistive indices. On T1-weighted MR images, they appear as a poorly marginated and infiltrative mass with low to intermediate signal intensity. On T2-weighted images, the mass appears heterogenous with high signal vascular components and areas of fatty signals. Arteriovenous malformations are seen as low-intensity serpentine vascular channels on all MR pulse sequences. Angiography demonstrates typical contrast puddling in capillary and cavernous types and tortuous feeding arteries with early draining veins in arteriovenous malformation. Scintigraphy with blood pool agents show increased uptake [3,5].

Haemangiomas are commonly seen in the extremities, neck, face and sometimes scalp. More extensive and simultaneous involvement of adjacent tissues is very uncommon and has been reported by few authors [1,2]. In our case, the lesion may have begun in the soft tissues and invaded the structures underneath. The rare possibility

also exists that several structures were involved simultaneously.

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