

Large and Long Standing Cavernous Hemangioma of Cheek

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ABSTRACT

Cavernous hemangiomas are relatively rare vascular malformations especially in an adult. The childhood hemangioma generally regresses spontaneously. We present the case report of a 52-year-old male patient, who had a hemangioma from the childhood and it had grown to such a large size so as to cause extreme cosmetic deformity for the patient. The long standing duration of almost 45 years and the extremely large size of the hemangioma make it a very rare case.

Keywords: Cavernous hemangioma, Cheek, Excision.

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INTRODUCTION

Cavernous hemangiomas, a type of blood vessel malformation that has relatively large blood-filled spaces which lack the muscles and support structures that help to give arteries and veins. Cavernous hemangiomas do not contain tissue of the organ in which they are situated. Hemangiomas of the face and oral cavity have varied clinical presentation and often the management is extremely complex.¹ About three fourths of hemangiomas present at birth or during childhood² but some are first noticed in adults. Spontaneous resolution is well known and the chance of regression seems to depend on how early in life the lesion appears. Clinical appearance is extremely variable. Sizes range from pinpoint to covering over half the face. The skin is sometimes involved as a purple, raised, nodular mass, at other times it appears normal. The mass is usually compressible, with blood flowing back upon release of pressure. There is sometimes a pulsation and a bruit can often be heard, depending on the amount of arteriovenous fistulization. Treatment includes observation, irradiation, sclerosing solutions, and laser and excisional surgery. Choice of treatment depends on clinical presentation, although surgical extirpation remains the mainstay. The approach to large facial hemangiomas has included ligation of feeding vessels, radiotherapy and injection of sclerosing agents, all with only partial effectiveness. An aggressive surgical approach offers the best chance of long-term cure,

and often requires extensive preoperative preparation and intraoperative management.³

CASE REPORT

A 52 years male patient presented to the ENT OPD of with history of swelling of right cheek from childhood. The swelling was insidious in onset, slowly progressive; it had rapidly increased in size from last 2 months. The patient did not have any history of difficulty in chewing and swallowing, history of numbness of face and swelling in other part of body. On examination, 10 × 10 cm size single swelling was involving right cheek (Fig. 1). It was extend from inferior orbital rim superiorly, angle of mandible inferiorly, anteriorly from angle of mouth, posteriorly 1 cm from tragus. The overlying skin was normal and on palpation local temperature was raised. The swelling was soft in consistency with small size multiple hard area present and compressible. On auscultation, bruit was audible. The contrast-enhanced CT scan showed contrast enhancing mass involved soft tissue of right cheek with dilated vessel and phleboliths (Figs 2 and 3). The FNAC report showed blood only. The patient underwent biopsy of mass under general anesthesia with suspected diagnosis of vascular malformation. The biopsy report came out as cavernous hemangioma. Patient was posted for excision of mass under general anesthesia. The control on feeding vessel was taken and mass removed *in toto* (Fig. 4). The final biopsy report was cavernous hemangioma. The patient was disease free even after 6 months of follow-up.



Fig. 1: Preoperative photograph

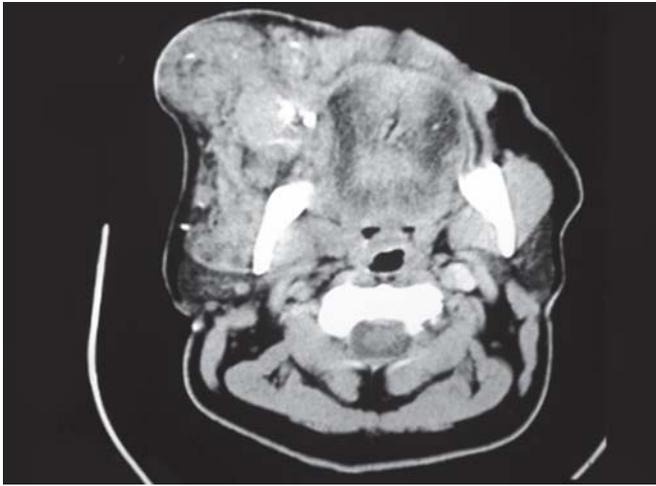


Fig. 2: CECT axial cut



Fig. 3: CECT coronal cut



Fig. 4: Intraoperative photograph

DISCUSSION

Hemangiomas are congenital, benign, well-circumscribed malformations of the vasculature. Capillary hemangiomas are more common in infants, while cavernous lesions are

more common in adults. Capillary hemangiomas tend to be more superficial than cavernous lesions, as they usually occur in the dermal layer, and they gradually undergo involution. Cavernous hemangiomas appear as globular, compressible, bright-red or deep-purple lesions, which sometimes temporarily enlarge during straining. They tend to involve the deep, subcutaneous tissues. Cavernous hemangiomas are less likely to spontaneously involute.⁴ These benign, vascular lesions are slow growing and can manifest as a painless, progressively mass. The scalp, face and neck are the most common sites, but these tumors have been found in the liver and other organs. The true incidence of cavernous malformations is difficult to estimate because these lesions may be mixed with other forms of vascular malformations. Superficial cavernous hemangiomas are friable and easily infected if the skin is broken. They vary in size from punctate to several centimeters. Cavernous malformations are vascular malformations with low flow. They are 'occult' to angiography. On CT scan, one may see the evidence of hemorrhage of various ages and with contrast administration the lesion itself may enhance.⁵ MRI offers the most sensitive means of suspecting a diagnosis of cavernous malformation.^{6,7} On microscopic examination, cavernous malformations are shown to be composed of dilated, thin-walled capillaries that have one layer of endothelial lining and a variable layer of fibrous adventitia. Elastic fibers are absent in the walls of these vascular caverns.⁸ There is usually evidence of previous hemorrhage on pathological examination. Thrombosis may be present within some of the lumens. The treatment options include surgery, irradiation, laser therapy, cryotherapy and instillation of sclerosing agents. The most effective treatment is a wide surgical excision. Surgery is indicated for large tumors that invade adjacent structures and cause functional derangement, disfigurement or pain. Postoperative radiation therapy is suggested for troublesome recurrent tumors, but its use as a primary treatment is not recommended.⁹

Patients who have had hemangiomas removed should be followed periodically because the rate of recurrence is high.

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