



DIFFUSE CAVERNOUS HEMANGIOMA FACE- AN UNUSUAL PRESENTATION AND MANAGEMENT

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ABSTRACT

Cavernous hemangiomas are relatively rare vascular malformations especially in elderly age group. The childhood hemangioma generally regresses spontaneously. We present here the case report of a 62 year old female patient who presented to ENT OPD with multiple swellings on face since childhood and had grown in size causing extreme cosmetic deformity for the patient. The patient underwent laser photocoagulation of swellings under general anesthesia and histopathology came out as cavernous hemangioma. This case is being reported here for its rare presentation.

Key words: Cavernous hemangioma, Face, Laser, Photocoagulation.

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INTRODUCTION

Vascular tumors are broadly classified into two groups: Hemangioma and vascular malformation, according to the novel classification given by Mulliken et al. in 1982. Hemangioma is histologically further classified into capillary and cavernous forms. Capillary hemangioma is composed of many small capillaries lined by a single layer of endothelial cells supported in a connective tissue stroma of varying density, while cavernous hemangioma is formed by large, thin walled vessels, or sinusoids lined by epithelial cells separated by thin layer of connective tissue septa. Hemangiomas are considered as benign tumors and

characterized by 3 stages: Endothelial cell proliferation, rapid growth and at last spontaneous involution. About 60% to 70% of the lesions are found in the head and neck region [1].

The pathophysiology of hemangiomas is attributed to genetic and cellular factors, mainly to monocytes, which are considered the potential ancestors of hemangioma endothelial cells. The imbalance in the angiogenesis, which causes an uncontrolled proliferation of vascular elements, associated with certain factors such as vascular endothelial growth factor (VEGF) and fibroblast growth factor (FGF), which are found in large amount during proliferative stages, are believed to be the cause [2]. Cavernous hemangiomas are a type of blood vessel malformation containing relatively large blood-filled spaces but lacking the muscles and support structures.

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Hemangiomas of the face and oral cavity have varied clinical presentation and often the management is extremely complex. About three fourths of hemangiomas present at birth or during childhood but some are first noticed in adulthood. Spontaneous regression is well known in the literature which depends on how early the lesion appears in life. Sizes range from pinpoint to covering over half the face. The skin may be sometimes involved as a purple, raised, nodular mass, at other times it may appear normal. The lesion 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 options include observation, irradiation, sclerosing agents, and laser or excisional surgery. Choice of treatment depends on clinical presentation and extent of involvement [3,4].

CASE REPORT

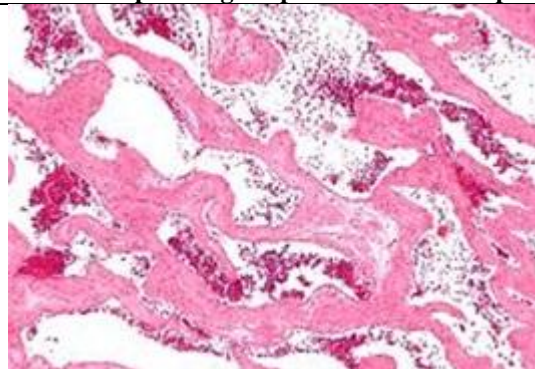
A 62 years old female presented to ENT OPD with complaint of multiple swellings on the face since childhood. The swellings were insidious onset, gradually progressive

and had grown in size causing cosmetic deformity for the patient. Rest of the medical history was non contributory. Examination revealed multiple swellings over left side of face, dorsum and root of nose, supraorbital and infraorbital region including medial canthus area. Swellings were soft and non tender on palpation without local rise of temperature (Figure 1). No bruit was audible on auscultation. Neurofibromatosis was kept as differential diagnosis and all relevant investigations were done to rule out this condition including urine for VMA, ultrasound abdomen but all were negative for neurofibromatosis. Fine needle aspiration cytology showed blood only. The patient underwent laser excision of swellings under general anesthesia using laser safety tube with suspected diagnosis of venous malformation (Figure 1). Histopathology came out as cavernous hemangioma. Patient was discharged in stable condition. Although cases are there in literature on cavernous hemangioma of head neck region but no such case with varied presentation has been reported so far. This case is being presented here for its rarity and management is discussed.

Figure 1: Showing preop, immediate postop and follow-up after 3 months



Figure 2: Histopathological picture of excised specimen



DISCUSSION

Hemangioma usually requires no intervention however; 10-20% demands treatment depending on variety of factors including size, location and progression of lesion. Various modalities of treatment includes intralesional steroid or sclerosant therapy, embolization

and surgery-conventional and laser excision [5,6]. Among the sclerosing agents available, good results have been reported with sodium sulfate tetradecyl, polidocanol and ethanolamine oleate, and hypertonic glucose solution. Growing hemangioma can be treated effectively by systemic drug therapy, surgical excision, laser therapy or

combined therapy. Conventional surgery is usually associated with many complications however absence of intraoperative bleeding, shorter operation duration and lower morbidity are advantages of laser photocoagulation over conventional surgery [7]. Several types of lasers can be used for treatment of vascular lesions of the head and neck region. Carbon dioxide (CO₂) lasers and potassium titanyl phosphate (KTP) lasers are used for ablation of subglottic hemangiomas [8]. The use of CO₂ and Nd:YAG lasers in endoscopic laryngeal microsurgery is well documented in the literature for the treatment of glottic cancer. In our case patient's quality of life was improved in a minimally invasive fashion. Although postoperative irradiation is suggested for troublesome recurrent tumors but its use as a primary tool is not recommended in literature [9].

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CONCLUSION

Cavernous hemangiomas are relatively rare vascular malformations especially in elderly age group. The childhood hemangioma generally regresses spontaneously. Surgery is indicated for large and multiple swellings causing disfigurement and pain as seen in this case. The treatment options include surgery, laser excision or cryotherapy and sclerosing agents. Lower morbidity, minimal patient discomfort and satisfactory aesthetic results make laser photocoagulation a promising treatment for such lesions.

Conflict of Interest

[No financial interest or any conflict of interest.]

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