CASE REPORT

A giant compound hemangioma of lower lip

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ABSTRACT
Hemangioma is one of the most common benign tumors of vascular origin affecting 10–12% of infancy. Approximately 50% of hemangiomas resolve by the age of 5 years and 90% resolve by 9 years of age. Rarely hemangiomas may persist, warranting systemic or surgical treatment. Treatment depends on size, location, and evolution stage of the lesion. In this study, we present a case of huge hemangioma involving lower lip in a 20-year-old male for whom early treatment was ignored due to poor economic status, which was recognized and treated in our institution.

Key words: Hemangioma, lip, vascular malformation

INTRODUCTION

Hemangiomas are benign vascular tumors commonly occurring in infancy and childhood; few may be present from birth or even develop in adults.[1,2] Hemangiomas are three times more common in females than in males. Sixty percent of the lesions occur in head and neck region with lip, tongue, and palate being the most preferred site.[1] Clinically, hemangioma presents as smooth or lobulated soft tissue mass, measuring few millimeters, which is hardly noticeable, to several centimeters causing physical disfigurement and functional disturbance.[1,2] Most of the lesion involutes spontaneously, needing no further treatment. Treatment for the persistent lesion depends on age of the patient, size, location, extension, and evolution stage of the lesion.[2,3]

CASE REPORT

A 20-year-old male patient reported to our institution with a chief complaint of swelling of the lower lip. The swelling developed soon after the birth, which gradually increased to the present size of 3.8×2.5 cm. The general health of the patient was normal and medical history revealed no significant health problems. The patient had difficulty in closing the mouth. The swelling was well lobulated and had well-defined margins extending throughout the lower lip. The skin over the swelling appeared normal except for the dryness over it [Figure 1]. Palpation revealed a soft and nontender swelling. The differential diagnosis of hemangioma or arterio venous malformation was narrowed to hemangioma when auscultation revealed no thrill or bruit. Magnetic resonance imaging (MRI) findings brought to the limelight the diagnosis of hemangioma, which ruled out arteriovenous malformation by the absence of flow voids [Figure 2]. Intralesional injection of triamcinolone under pressure was administered following which complete excision of the lesion was carried out. Histopathological report revealed large dilated blood sinuses with thin walls lined by endothelium. The sinusoidal spaces were filled with red blood cells [Figures 3 and 4]. The histopathology conclusively made us arrive at a diagnosis of hemangioma involving both superficial and deeper tissues.

DISCUSSION

The hemangiomas and vascular malformations are two distinct groups of vascular lesions, which are often confused with each other, and unfortunately terms have been used interchangeably. Vascular lesions are classified based on anatomical, structural features and biological behavior.[4] They divided the lesions majorly into hemangiomas and other vascular malformations. The term hemangioma encompasses heterogeneous group of vascular lesions characterized by altered endothelial cell growth and proliferation. In contrast, vascular malformations are structural anomalies of blood vessels without endothelial cell proliferation.[4,5] Table 1 shows differences between hemangiomas and vascular malformations.

In our case, development of swelling soon after the birth and persistence of swelling even after 10 years made us consider both vascular malformation and hemangiomas in differential diagnosis. Hemangiomas involute by itself at or

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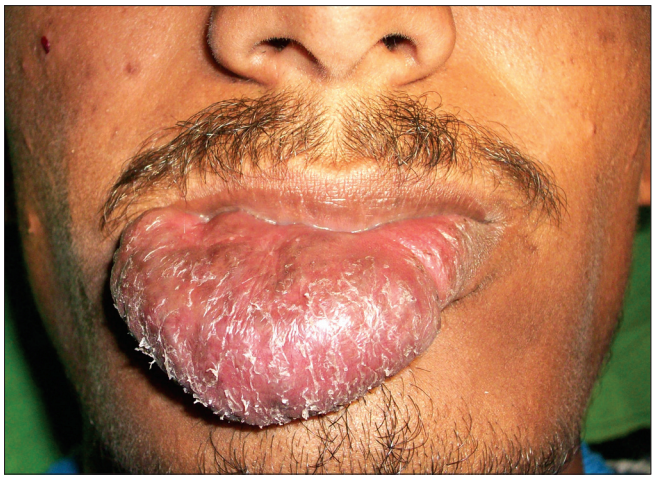

Figure 1: Clinical photograph showing giant swelling of the lower lip

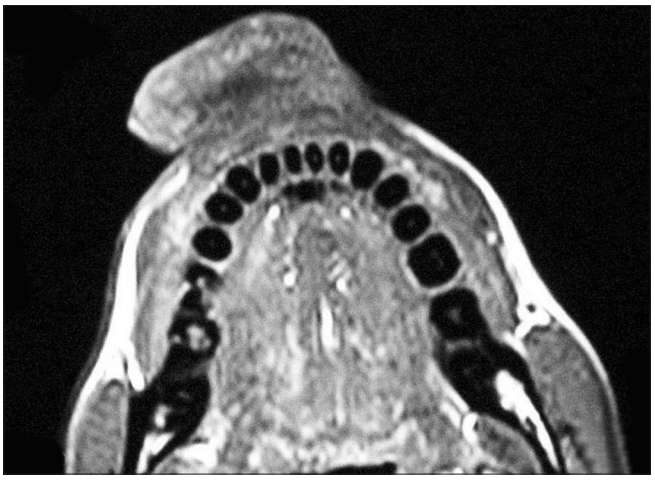

Figure 2: Magnetic resonance imaging showing involvement of superficial and deeper tissues

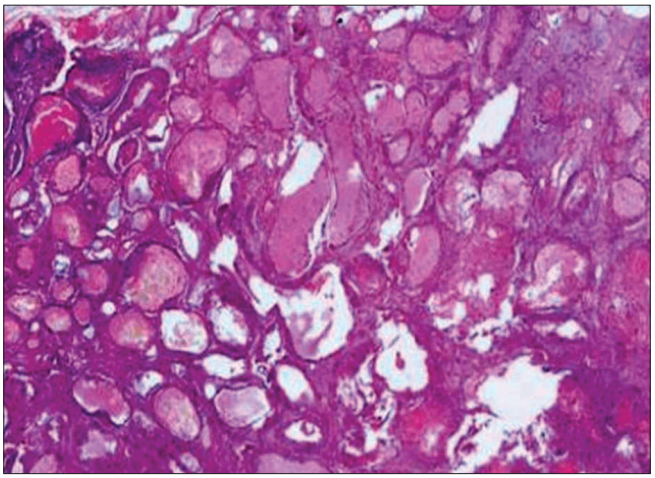

Figure 3: Low power photomicrograph showing large dilated blood sinuses with thin walls lined by endothelium (H and E stain, ×10)

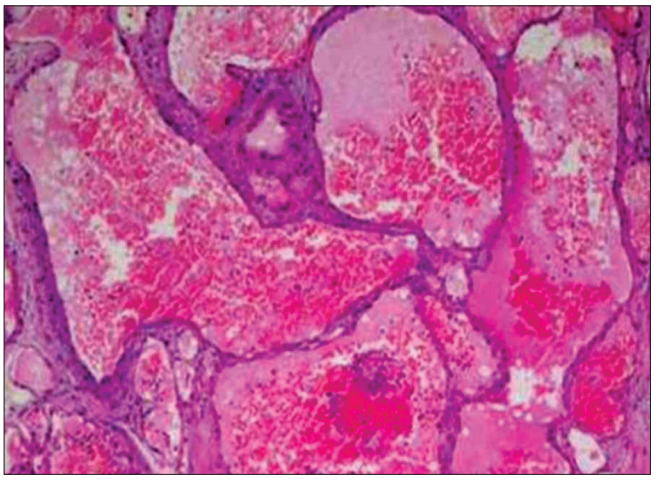

Figure 4: High power photomicrograph showing dilated blood sinuses engorged with red blood cells (H and E stain, ×40)

Table 1: Difference between hemangiomas and vascular malformation[2,4,5]

Hemangiomas	Vascular malformations
Appears few weeks to months after birth, rarely present at birth	They are present from birth
Females are predominantly affected	Affects male, female, and infants in equal frequency
Shows three phases of growth pattern: – rapid growth phase, quiescent phase, and phase of regression	Increases in size as the patient grows and do not regress spontaneously
Characterized by altered endothelial cell growth and proliferation	They are structural anomalies of blood vessels without endothelial proliferation
Sub-divided into superficial, deep, and mixed type	Sub-divided into capillary, venous, arterial, and lymphatic malformations

around 10 years of age, which was not true in our case. But the absence of bruit or thrill during auscultation along with MRI report and histopathological view, made us to arrive at the diagnosis of hemangioma.

Hemangiomas are the most common tumor of infancy and are three times more common in females and males. Sixty percent are localized to head and neck region.[1,2,5] Lip may be one of the common site to develop.[2,4] Hemangiomas are classified into superficial (capillary hemangioma), deep (caverouns hemangioma), and compound or mixed (capillary cavernous hemangioam) type.[1,3] In this case, both superficial and deeper tissue of lower lip were involved leading us to the diagnosis of compound hemangioma.

Large, persisting hemangiomas may cause physical disfigure mentor functional disturbance for which the treatment becomes mandatory.[1,2] In this case, compound hemangioma, involving the deeper tissues in lower lip persisted and early surgical removal was not performed due to poor economic status of the patient. Administration of systemic corticosteroids, intralesional injection of sclerosing agent, eletrocoagulation, cryosurgery, laser therapy, embolization, and surgical excision are some of the treatment modalities practiced for hemangioma.[2,4] In this case, intralesional injection of

triamcinolone under pressure was administered following which complete excision of the lesion was carried out.

CONCLUSION

Detailed study of hemangioma and its growth pattern needs to be performed to hopefully yield targeted therapeutics to treat and reduce the unnecessary social embarrassment to the patient.

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