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## Hemangioma of lower lip: A case report

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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 05-year-old female child for whom early treatment was ignored due to poor economic status, which was recognized and treated in our institution using sodium tetradecyl sulfate intralesional injection.

**Keywords:** Hemangioma, lip, benign, tumors

### Introduction

Hemangiomas are benign vascular tumors <sup>[1]</sup> commonly occurring in infancy and childhood; few may be present from birth or even develop in adults <sup>[2, 3]</sup> 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.<sup>2</sup>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 <sup>[2, 3]</sup> 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 <sup>[3, 4]</sup>

### Case Report

A 05-year-old female child patient reported to our institution with a chief complaint of swelling of the lower lip. The swelling was present since 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 [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. Ultrasound findings brought to the limelight the diagnosis of hemangioma, which ruled out arteriovenous malformation by the absence of flow voids. Repeated Intralesional injection of sodium tetradecyl sulfate (sclerosing agent) was planned following complete excision of the lesion. [Figure 2, 3].



**Fig 1:** Pre-op

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**Fig 2:** After 1<sup>st</sup> injection in one week



**Fig 3:** After 3<sup>rd</sup> injection in three weeks

### 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 [5]. 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 [5, 6].

In our case, swelling was present since birth. Hemangiomas involute by itself at or around 10 years of age [7], which is not always true. But the absence of bruit or thrill during auscultation along with ultrasonography [8, 9] report, 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 [2, 3, 6]. Lip may be one of the common site to develop [3, 5]. Hemangiomas are classified into superficial (capillary hemangioma), deep (cavernous hemangioma), and compound or mixed (capillary cavernous hemangioma) type [2, 4]. Large, persisting hemangiomas may cause physical disfigurement, functional disturbance for which the treatment becomes mandatory [2, 3]. The treatment of choice for Hemangiomas depend primarily on the site and growth stage of the lesion [10]. The rationale behind treating a Hemangioma are to prevent or improve functional impairment or pain, to prevent or improve scarring or disfigurement or to avoid life threatening complications. Small, isolated or multiple skin lesions on face in infants are treated early to avoid progression into proliferation. Imiquimod is an immuno modifier used for small and intermediate sized Hemangiomas with alternate day topical application for a cycle of 3-5 months [11]. The drawback of the drug is hyper pigmentation which makes its use in the highly esthetic region such as the face controversial. 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, propranolol, [12] intralesional injection of sclerosing agent, electrocoagulation, cryosurgery, laser therapy, embolization, and surgical excision are some of the treatment modalities practiced for hemangioma [3, 5]. In this case, 4-5 repeated intralesional injection of sodium tetradecyl sulfate under pressure was administered [8, 13, 14]. After first injection size reduced upto 30%.

### 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.

Hemangiomas are a complex group of endothelial tumor having a heterogeneity in their presentation and treatment of Hemangiomas have always been a controversial issue, any treatment decision whether surgical or medical must be critically evaluated in terms of cure and esthetic results, and the choice of treatment plan should be individualized rather than a fixed treatment protocol. In my opinion intralesional sodium tetradecyl sulfate injection is safe and good treatment option. Further studies are required for better results.

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