

Case Report

## A Case Report-Inj Polidocanol in Haemangioma of Tongue

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**Abstract:** A haemangioma is a benign self-evolving tumour of the endothelial cells lining the blood vessels. Its characteristic is increased number of normal or abnormal vessels filled with blood. It is more commonly seen in infancy or early childhood. Commonest sites in the oral cavity are lips, tongue, buccal mucosa and palate. We are reporting a rare case of 55 yr old lady with haemangioma of tongue. Case was managed conservatively using Sclerosing agent INJECTION POLIDOCANOL in 30 mg strength diluted with distilled water in 1:3 Concentration.

**Keywords:** Haemangioma tongue, Sclerosing agent- Polidocanol

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**INTRODUCTION**

Term haemangioma is used to describe tumour-like malformations composed of seemingly disorganised masses of endothelium-lined vessels that are filled with blood and connected to the main blood vascular system. They have been described in almost all locations in the body [1]. Approximately 80% are located on the face and neck, with tongue an uncommon site for them, with next the most prevalent location being the liver [2]. The cause of haemangioma is currently unknown; however, several studies have suggested the importance of estrogen signalling in haemangioma proliferation. Most haemangiomas disappear without treatment, leaving minimal or no visible marks. Large haemangiomas can leave visible skin changes secondary to severe stretching of the skin or damage to surface texture. When haemangiomas interfere with vision, breathing, or have the threat of significant cosmetic injury (facial lesions and in particular, nose and lips), they are usually treated. The mainstay of treatment till recent past was oral corticosteroid therapy, but now alternative treatments are increasingly coming in vogue including beta-blocker propranolol, cryotherapy, sclerosing agents, embolization, photocoagulation and carbon dioxide laser. Surgical removal is sometimes indicated, particularly if there has been delay in commencing treatment and structural changes have become irreversible.

**CASE REPORT**

55 year old female presented with complain of swelling in the mouth involving the right lateral border of the tongue since six months. According to the patient, the swelling was present from past 6 months, the swelling in the tongue gradually increased to the present size. Pain, fever, difficulty in the speech and swallowing or any other associated features were absent. Past medical, dental and family histories were non-significant. Physical general examination was normal with all her vital signs being within normal limit.

Intra-oral examination (Figure 1& 2) revealed a solitary dome-shaped swelling in the right anterior part of tongue extending both dorsally and ventrally, measuring about 2 x 3.5 cm in size. The surface was smooth and granular with well-defined borders. Colour of the swelling was bluish purple with normal surroundings. Swelling was soft to firm on palpation, non-mobile, non-tender, and normal in temperature with no appreciable thrills but blanched on compression.

Patient was diagnosed as a case of haemangioma with differential diagnosis of a granular cell myoblastoma, angiomyolipoma, angiosarcoma, hemangiosarcoma and Kaposi's sarcoma.

General investigations including blood and urine were normal. Colour Doppler ultrasound revealed hypochoic lesion measuring 1.5 × 2.5 cm seen in the

right anterior lateral aspect of the tongue with intermittent colour picking consistent with vascular lesion.



**Fig-1: Photograph showing extension of lesion on tongue**



**Fig-2: Photograph showing ventral extension of lesion on tongue**

Patient was treated with Inj. Polidocanol 30mg diluted in 1:3 concentrations with distilled water. Inj. Polidocanol is a potential sclerosant with local anaesthetic property. Inj. Polidocanol 30 mg diluted in 1:3 concentrations with distilled water was injected intralesionally at multiple sites mainly at the centre and at the periphery with 2 ml syringe. 2 ml of Inj Polidocanol was injected in one sitting. Manual compression was applied at the periphery of the lesion to confirm stasis. The same process was repeated after a gap of two weeks interval, two times. Patient had mild pain and irritation at the site of injection. For pain she was given oral analgesics for 3 days.

She had considerable relief of the symptoms, cosmetic improvement with no complications. Patient follow up (Figure 3) was done for six months and all the tongue movements were normal, lesion regressed almost completely and there was no recurrence of the similar lesion.



**Fig-3: Photograph showing follow up after six months**

## DISCUSSION

The word "Haemangioma" is derived from the Greek word – haema means blood, angio means vessel & the suffix oma means tumour, as a result it is a blood vessel tumor. It is a tumor of infancy & most cases appear during the first few days or weeks of life & resolve within the age of 10 years [2]. The cause of haemangioma is currently unknown; however, several studies have suggested the importance of estrogen signalling in haemangioma proliferation [11, 12].

Haemangiomas are common lesions of face, nose, throat, ear, neck, liver and most often seen to involve the lips, tongue and buccal mucosa. They are classified into three basic types, capillary haemangioma, cavernous haemangioma and arterial or plexiform haemangioma [2]. Before considering the haemangioma, it is important to understand that there have been changes in the terminology used to define, describe and categorise vascular anomalies. The term haemangioma was originally used to describe any vascular tumor like structure, where it was present at or around birth or appeared in later life. Haemangioma are the most common childhood tumor. Females are five times more likely to have haemangioma than males. They are also common in twin pregnancies. Approximately 80% are located on the face and neck, with tongue an uncommon site for them, with next the most prevalent location being the liver [3].

Clinically haemangioma are characterized as a soft, smooth or lobulated, sessile or pedunculated and may be seen in any size from a few milli-meters to several centi-meters. The colour of the lesion ranges from pink to red purple and tumour blanches on the application of pressure, and haemorrhage may occur either spontaneously or after minor trauma. They are generally painless [4].

Haemangioma of the tongue are rare lesions which can cause distressing problem to the patients, producing cosmetic deformity, recurrent haemorrhage, and functional problems with speaking, mastication and deglutition. The most frequent complaints about

haemangioma, however, stem from psychosocial complications; the condition can affect a person's appearance and can provoke attention and malicious reaction from others.

A randomized trial showed that the beta-blocker propranolol reduced severe haemangioma in infants [5]. The topically applied beta blocker solution/gel Timolol is also being tried for small facial haemangiomas that do not justify systemic treatment. Other treatments that have been used include interferon or vincristine. They may be considered if first-line therapy fails. Besides these, the other modalities used in the management of oral haemangioma include cryotherapy embolization photocoagulation and carbon dioxide laser [6,7,8,9]. Surgical removal is sometimes indicated, particularly if there has been delay in commencing treatment and structural changes have become irreversible.

Some similarity with regard to the location and the number of lesions, with cases reported earlier in the literature was observed in this case, since approximately 80% of the patients present a single lesion, and the head and neck region is the most commonly affected [10,13,14].

Present case report emphasizes tongue though, uncommon can be a site of haemangioma and its treatment with Inj Polidoconal can be an effective and safer alternative.

## CONCLUSION

The haemangioma, a benign proliferation of endothelial cells seen commonly in the head, neck region is relatively rare in the oral cavity. In the oral region, the most common location is the lip. Usually haemangioma regresses spontaneously without treatment. However we present a case report emphasizing tongue though, uncommon, can be a site of haemangioma and its treatment with Inj. Polidoconal can be an effective and safer alternative.

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