# **Cavernous lymphangioma: Two case reports**

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# **ABSTRACT**

Lymphangiomas are congenital malformation of the lymphatic system that involve the skin and subcutaneous tissues. We are reporting two cases of cavernous lymphangioma. These cases are presented for their rarity.

Key words: Cavernous lymphangioma, congenital malformations, lymphatic malformation

### INTRODUCTION

Lymphangiomas are congenital malformations of the lymphatic system that involve the skin and subcutaneous tissues. Lymphangiomas have been classified into lymphangioma simplex (capillary lymphangioma), cavernous lymphangioma, and cystic lymphangioma (cystic hygroma). [1] Hemolymphangioma is another variant with features showing both a vascular and a lymphatic component. The head and the neck, followed by the proximal extremities, the buttocks, and the trunk are the most commonly involved sites.



Figure 1: Patient with swelling over the chin more on the left side

# **CASE REPORTS**

#### Case 1

A 15-year-old girl reported to our department with the complaint of diffuse, painless swelling of the lower part of the face since birth. On examination the swelling involved the whole of the mandible area. The swelling was soft in consistency, non tender, and non-compressible [Figure 1]. The swelling was present since birth and has not increased in size. Surgical scar was present in the right side of the angle of mandible. Intraoral examination revealed macroglossia with fissured tongue [Figure 2]. Articulation was normal.

Incisional biopsy from the lesion revealed epidermis, overlying lymph spaces, and sebaceous glands in the fibrocollagenous dermis. Biopsy of the tongue lesion revealed fragments of stratified squamous epithelium enclosing thin walled vascular and lymphatic spaces in a scanty stroma showing lymphoid



Figure 2: Tongue showing macroglossia

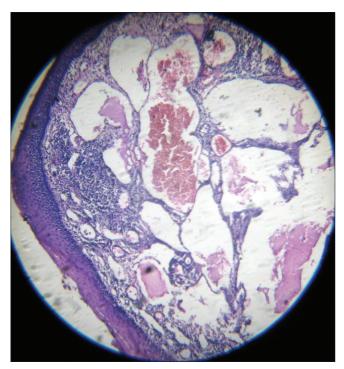
aggregates [Figure 3]. Hemolymphangioma is another variant with features showing both a vascular and a lymphatic component.

CT-neck revealed an ill defined heterogeneous lesion with variable degrees of enhancement involving the mental, submental, submandibular, base of tongue, cheek, bilateral para pharyngeal, and masticator spaces with the left side affected more than the right side. Left parotid gland was

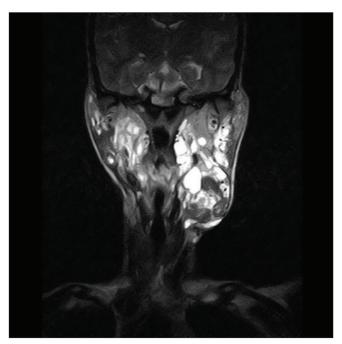
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involved by the lesion and small calcifications noted within the lesion in the left submandibular region. The tongue appeared thickened, especially in the anterior part and showed altered signal intensity [Figure 4].



**Figure 3:** HPE section showing fragments of stratified squamous epithelium enclosing thin walled vascular and lymphatic spaces [H & E, 40x]



**Figure 4:** CT-neck revealed an ill-defined heterogeneous lesion with variable degrees of enhancement affecting the left side more than the right.

#### Case 2

A 14-year-old boy came to our OPD with the complaints of painless swelling in the left lower part of the face and macroglossia since birth with on and off history of bleeding from the tongue for the past 6 months. Parents had noticed that the child had a larger lower jaw since birth. The swelling gradually increased in size over the years.

There was a history of surgical excision for a similar swelling on the right lower face in the mandibular region which was also present since birth; details of the surgery not known. On clinical examination, a solitary ill-defined swelling measuring roughly 2×3 cm in size was noted in the left chin region [Figure 5]. It was warm, non tender and non compressible. The tongue was grossly enlarged. The dorsum anterior 2/3rd and pos 1/3rd and the lateral surface appears pebbly showing numerous erythematous pinpoint projections [Figure 6]. The tongue also appears lobulated. The midline furrow appears deepened. The movements of the tongue were restricted due to tongue-tie. On



Figure 5: A solitary ill-defined swelling in the left chin region



**Figure 6:** Macroglossia and pebbly appearance of the tongue with numerous erythematous pin-point projections

palpation, the tongue was firm in consistency and non tender on palpation.

Incisional biopsy from the lesion revealed stratified squamous epithelium overlying bundles of fibro muscular tissue enclosing lymph spaces consistent with lympangioma [Figure 7].

# **DISCUSSION**

Lymphangiomas are hamartomatous, congenital malformations of the lymphatic system-derived embryologically from five primitive buds developing from the venous system. <sup>[2]</sup> The anterior two-thirds on the dorsal surface of tongue is the most common site for intraoral lymphangioma leading to macroglossia. <sup>[3]</sup> The various treatment modalities for lymphangioma are surgical excision, <sup>[4]</sup> radiation therapy, cryotherapy, electrocautery, sclerotherapy, steroid administration, embolization, and ligation, laser surgery with Nd-YAG, CO<sub>2</sub>, diode and radiofrequency tissue ablation technique. <sup>[5,6]</sup> OK-432 is the preferred intralesional sclerosant. <sup>[7,8]</sup> In this case surgical excision including the involved parotid glands is planned as to prevent recurrence.

# **REFERENCES**

1. Rathan JJ, Vardhan BG, Muthu MS, Venkatachalapathy, Saraswathy K,

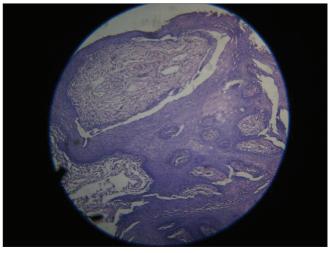


Figure 7: HPE showing stratified squamous epithelium overlying bundles of fibromuscular tissue enclosing lymph spaces [H & E, 40x]

- Sivakumar N. Oral lymphangioma: A case report. J Indian Soc Pedod Prev Dent 2005;23:185-9.
- Morley SE, Ramesar KC, Macleod DA. Cystic hygroma in an adult: A case report. J R Coll Surg Edinb 1999;44:57-8.
- Shafer WG, Hine MK, Levy BM. Developmental disturbances of the tongue. A textbook of Oral Pathology. 4th ed. Philadelphia, WB Saunders Co; 1983. p. 159-60.
- Riechelmann H, Muehlfay G, Keck T, Mattfeldt T, Rettinger G. Total, subtotal, and partial surgical removal of cervicofacial lymphangiomas. Arch Otolaryngol Head Neck Surg 1999;125:643-8.
- Harashima T, Hossain M, Walverde DA, Yamada Y, Matsumoto K. Treatment of lymphangioma with Nd: YAG laser irradiation: A case report. J Clin Laser Med Surg 2001;19:189-91.
- Angiero F, Benedicenti S, Benedicenti A, Arcieri K, Bernè E. Head and neck hemangiomas in pediatric patients treated with endolesional 980-nm diode laser. Photomed Laser Surg 2009;27:553-9.
- Rautio R, Keski-Nisula L, Laranne J, Laasonen E. Treatment of lymphangiomas with OK-432 (Picibanil). Cardiovasc Intervent Radiol 2003;26:31-6.
- Grasso DL, Pelizzo G, Zocconi E, Schleef J. Lymphangiomas of the head and neck in children. Acta Otorhinolaryngol Ital 2008;28:17-20.

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