DOI: http://dx.doi.org/10.31782/IJCRR.2022.14614



Multiple Swellings on the Tongue of a Young Female: Report of a Rare Case

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ABSTRACT

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Introduction: Lymphatic malformations are a part of low- flow lesions of the lymphatic channels. Due to increased lymph in the head and neck region, nearly 70% of lesions occur in these locations. They can manifest in the cheeks, tongue, around the alveolar ridge of mandible and parotid gland. Lymphangioma of tongue can be a difficult entity for diagnosis as it is less frequently encountered. So, it is crucial for the dental physicians to know about this condition for precise diagnosis and early treatment.

Case Report: A 16-year-old female reported with multiple swellings and enlarged tongue with difficulty in speech. The swellings were painless with no evidence of bleeding. There was no associated symptoms of fever or lymphadenopathy. Her medical history was non-contributory.

Discussion: In this case report, the clinical presentation and management of oral lymphangioma is briefly described

Conclusion: As oral diagnosticians, we should be aware of the conditions associated with oral vascular malformations to correlate with underlying systemic diseases providing holistic and multi-speciality management strategies.

Key Words: Lymphangioma, Lymph vessels, Macroglossia, Vascular malformation, Cystic hygroma, Tongue

INTRODUCTION

Vascular malformation is a diverse group of disorders that includes capillary, venous and lymphatic malformations. Since these disorders have several syndromic associations, patients with these lesions should be critically evaluated for underlying systemic illnesses. It is of utmost importance for oral health professionals to understand and identify this condition for prompt referrals and multi-disciplinary management.

Objective statement

To describe the clinical picture of oral lymphangiomas

CASE REPORT

A 16-year-old female reported to Department of Oral Medicine and Radiology, Manipal with a complaint of multiple swellings on the tongue for the past 6-7 months. She also reported of enlarged tongue, which gradually increased to the

present size with difficulty in speech. Patient did not report difficulty while breathing. The swellings were painless with no evidence of bleeding. There were no associated symptoms of fever or lymphadenopathy. Her medical history was non-contributory.

There was no extra-oral swelling or facial asymmetry. On intra-oral examination, (FIG. 1,2) there was evidence of enlarged tongue with multiple, yellow to pink bubbles and nodules of varying sizes seen on the ventral aspect of tongue seen resembling "Tapioca pudding". On palpation, the swellings were non-tender and soft in consistency with no active bleeding. With these clinical pictures, a provisional diagnosis of lymphangioma of tongue was given. The patient was advised Contrast Enhanced Computed Tomography (CECT) scan of tongue which showed evidence of well-defined small isodense mass on the ventral surface of tongue having mild homogenous enhancement with no calcifications, fat components and intense enhancement suggestive of possible low-flow vascular malformation (FIG. 3). Following CECT, patient was advised surgical

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ISSN: 2231-2196 (Print) **ISSN:** 0975-5241 (Online)

Received: 25.06.2021 Revised: 22.08.2021 Accepted: 25.09.2021 Published: 15.03.2022

management and histopathological evaluation. Patient did not report back due to financial constraints.



Figure 1: Photograph showing enlarged tongue with numerous sized bubbles on the dorsum of tongue.



Figure 2: Photograph showing multiple clear and blood-filled bubbles on the ventral aspect of tongue.

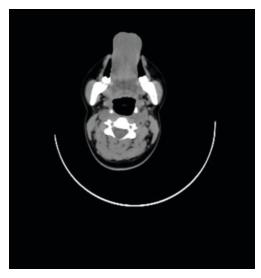


Figure 3: CECT scan of the tongue showing an enlarged isodense tongue mass.

DISCUSSION

Lymphatic malformations are a part of low- flow lesions of the lymphatic channels. The lesions are believed to originate due to sequestration of primitive anlage or due to stasis of regional lymphatics. Due to increased lymph in the head and neck region, nearly 70% of lesions occur in these locations. They can manifest in the cheeks, tongue, around the alveolar ridge of mandible and parotid gland.

Lymphangioma of the tongue can be seen as multiple small swellings known as "Frog's egg" appearance or the "Tapioca pudding" appearance. In mucosal involvement, there may be small translucent bubbles filled with blood, yellow to pink in colour with a pebbly appearance. Huge lesions tend to cause infiltration into adjacent structures and patients may experience respiratory obstruction.1 There can be acute exacerbations during certain respiratory infections and fluctuation of hormones at puberty.² Based on the size of the lymphatic spaces, the lesions are categorized as macrocystic and microcystic.3 The immune-histochemical marker 'Podoplanin D2-40' is positive in lymphatic malformations and aids in diagnosis. Lymphatic malformations form a part of few syndromes including Gorham- Stout syndrome and CLOVES syndrome (Congenital Lipomatous Overgrowth, Vascular malformation, Epidermal nevi and Skeletal anomalies).4 MRI is the choice of imaging as it enables to view the extent of the lesion and its association with the adjacent tissues without any penetrating radiation.⁵ Treatment include surgery, sclerosants, laser, cryotherapy and embolization.

CONCLUSION

Arteriovenous malformations are quite frequent lesions in routine dental practice. So it is imperative for the oral physicians to be aware of the condition, its differential diagnosis, medical and surgical management.

ACKNOWLEDGEMENTS

The authors thank the patient and patient's parents for their cooperation. The authors acknowledge the contribution of scholars whose articles are cited in this manuscript.

Conflict of interest: None
Source of funding: NIL

Declaration by patient: Informed consent was signed by the

patient

Author's contribution:

Dr Ranjanee Srinivasan- Patient examination, diagnosis and contribution to manuscript

Dr Shruthi Acharya- Patient examination, diagnosis and contribution to manuscript

Dr Ravindranath Vineetha- Contribution to manuscript

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