

Case Study

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A Case Study on Glossitis

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ABSTRACT

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Oral mucous membrane acts as the first defense mechanism when it comes in contact with irritants, drugs some wild fruits berries, and crustaceans such as shrimps, Crabs Lobsters, certain fishes. It can trigger an allergic reaction in the Oral cavity and throat. Different people are triggered by different food items. For each person the response is unique.

Introduction

Oral cavity is a mirror for an individual's health. Many systemic diseases manifest as oral ulcers and oral reactions. Early recognition and treatment limit the complications in many systemic and allergic conditions. Tongue being the sensitive organ with rich blood supply. Inflammation and taste disturbance are observed very early in many systemic diseases (1-3).

Case Report

A 19-year-old male presented with a red elevated inflamed patch like elevation on the tongue at a private dental clinic in Calicut, India. He complained of itching sensation on the tongue, congestion in throat. He had this

fear as if his tongue is swelling up. On oral examination the tongue had inflammatory changes with desquamative areas and white patchy area surrounding the reddish central portion on the tongue. Patient's oral hygiene was ok. Buccal mucosa was normal, but the palatal and lingual side of the gingiva had a reddish hue. He had no skin involvement or itching anywhere else other than the tongue.

He was asked for drug history. He denied of taking any medicine. His family history was asked, His mother had Asthma, but he said he had no systemic disease. Patient gave history of having Prawns in his lunch. He gave the history that he was having Prawns for the first time. Immediately after his lunch he had a choking feeling and he vomited. Immediately he came to the dental OPD. A complete blood

checks up and peripheral blood smear was advised.

Seafood allergy is an abnormal response by the body's immune system to proteins in certain marine animals. Protein allergy symptoms generally develop within minutes to an hour of eating crustaceans and mollusks, such as shrimp, crab, lobster, squid

The symptoms can be mild like Hives, itching or eczema. And become sever in some like Swelling of the lips, face, tongue and throat Wheezing, nasal congestion or trouble breathing, diarrhea, nausea or vomiting. Allergies can cause a severe, reaction Many food proteins can act as antigens in humans (4-5).

Hypersensitivity reactions are abnormal reactions of the immune system that occur in response to exposure to otherwise harmless substances. These reactions have true allergic and other non-allergic reactions and their severity can range from mild to life-threatening (6-7).The most severe hypersensitivity reaction is called

“anaphylaxis”. An anaphylactic reaction to shellfish can cause a medical emergency Several clinical reactions to food proteins have been reported in children and adults (8-9). Only a few of these have a clear allergic immunoglobulin E (IgE)-mediated pathogenesis (10).

The other common conditions are Iron deficiency anemia. Glossitis can be a early indicator of Iron deficiency anemia Iron is essential for the growth of all cells (11). Many studies have reported a highly significant reduction in the total epithelial thickness, particularly the thickness of the maturation compartment, and low enzyme levels in the buccal epithelium of iron-deficient patients.

Continued ID leads to reduced Hb levels that carry insufficient oxygen to oral mucosa and finally result in mucosal atrophy (12). The patient’s blood test was normal, so anemia was ruled out. Burning mouth syndrome is another condition which can be considered as a differential diagnosis. But in our case, the history of the patient was not relatable with burning mouth syndrome (13).

Fig.1 Picture showing elevated patch covering the central portion of the tongue



Patient was prescribed anti allergic Tablet legra120mg in the morning and Tablet Cetirizine 10 mg in the night, for 2 days. Along with this he was given 0.5 mg Betamethasone mouth dissolving tablets, to be dissolved in the mouth twice daily for the next five days. Patient was advised not to drive any vehicle as he was prescribed Cetirizine in the night. He was followed for a checkup the third day. Third day on oral examination the white desquamative areas had disappeared. The swollen feeling of the tongue was no more. His throat congestion was gone. Patient was asked to continue Tab Cetirizine only at night for another 3 days. The spectrum of signs and symptoms of oral contact allergies is broad. No specific clinical picture is constant. In this particular case the history was so specific, with the help of hematological profile other common lesions could be ruled out

Declaration of interests

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References

- Byrd JA, Bruce AJ, Rogers RS. Glossitis and other tongue disorders. *Dermatol Clin*. 2003 Jan;21(1):123-34.
- Joseph BK, Savage NW. Tongue pathology. *Clin Dermatol*. 2000 Sep-Oct;18(5):613-8.
- Parada C, Chai Y. Mandible and Tongue Development. *Curr Top Dev Biol*. 2015;115:31-58.
- Johansson SG, Bieber T, Dahl R, Friedmann PS, Lanier BQ, Lockey RF, *et al.*, Revised nomenclature for allergy for

global use: report of the nomenclature review committee of the World Allergy Organization, October 2003. *J Allergy Clin Immunol*. 2004;113:832–836. doi: 10.1016/j.jaci.2003.12.591.

- Bakula A, Lugović-Mihić L, Situm M, Turcin J, Sinković A. Contact allergy in the mouth: diversity of clinical presentations and diagnosis of common allergens relevant to dental practice. *Acta Clin Croat*. 2011;50:553–561.
- Chavanne L. (Case of allergic hemiglossitis) *sl: JFORL J Fr Otorhinolaryngol Audiophonol Chir Maxillofac*. 1972;21:71.
- Tosti A, Piraccini BM, Pazzaglia M. Contact stomatitis. *Emedicine*. 2002. <http://www.emedicine.com/derm/topic647.htm>.
- Adya KA, Inamadar AC, Palit A. The strawberry tongue: What, how and where? *Indian J Dermatol Venereol Leprol*. 2018 Jul-Aug;84(4):500-505.
- Shareef S, Etefagh L. StatPearls (Internet). StatPearls Publishing; Treasure Island (FL): Aug 10, 2020. Geographic Tongue.
- Hussein Gadban, Peter Gilbey, Yoav Talmon, Alvin Samet. Acute edema of the tongue: a life-threatening condition. *sl: Ann Otol Rhinol Laryngol*. 2003;112:651–3.
- Johnson-Wimbley, T.D., D.Y. Graham Diagnosis and management of iron deficiency anemia in the 21st century *Therap Adv Gastroenterol*, 4 (2011), pp. 177-184 View Record in Scopus Google Scholar
- Bermejo, F., S. García-López A guide to diagnosis of iron deficiency and iron deficiency anemia in digestive diseases *World J Gastroenterol*, 15 (2009), pp. 4638-4643
- Jimson S, Rajesh E, Krupaa RJ, Kasthuri M. Burning mouth syndrome. *J Pharm Bioallied Sci*. 2015;7(Suppl 1):S194–S196.

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