

CASE REPORT



Oral lichenoid reaction on right buccal mucosa: A case report

Tejavathi Nagaraj, Swati Saxena, Haritma Nigam, Arundhati Biswas, Poonam Sahu

Department of Oral Medicine and Radiology, Sri Rajiv Gandhi College of Dental Sciences, Bengaluru, Karnataka, India

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Correspondence:

Dr. Swati Saxena, Department of Oral Medicine and Radiology, Sri Rajiv Gandhi College of Dental Sciences, Bengaluru - 560 032, Karnataka, India. Phone: +91-9015660832. E-mail: swatisaxen@gmail.com

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Abstract

Oral lichenoid reactions (OLRs) have been considered as variants of oral lichen planus (OLP) and can be regarded as a disease *per se*, or it can be considered as an exacerbation of a pre-existing OLP by the presence of medication or dental materials. OLRs represent a type IV hypersensitivity reaction and mostly affect the oral mucosa when comes in direct contact with drugs or dental materials. OLRs can cause functional difficulty and significant discomfort in the patients, and hence, oral physicians should be aware of such reactions, its etiology, site of occurrence, diagnosis, and management. Here, we report a case of OLR of the right buccal mucosa associated with the placement of a lozenge for sore throat in the region of lower buccal vestibule and mucosa. Healing of the lesion was noted following the disuse of lozenge in that area.

Introduction

The oral mucosa provides an effective barrier against various deleterious substances which can enter through the mouth and harm the body.

The term “lichenoid tissue reaction” was first coined by Pinkus, in 1973, for the histological pattern showing the damage to the keratinocytes, now referred to as apoptosis, infiltrate of the inflammatory cells in the connective tissue which may extend into the epithelium.^[1,2]

The oral lichenoid reaction (OLR) is clinically and histologically indistinguishable from that of the oral lichen planus (OLP). However, it is seen that most of the OLRs disappear when the causative substance (drug/restorative material) is eliminated.^[3]

OLRs occur in the mucosae which remain in direct contact with the causative agent. They generally represent a type IV hypersensitivity reaction.

This reaction will occur in a small susceptible population group by accumulation of the causative agents in healthy and/or damaged oral mucosa resulting in white patches in reticular fashion, plaques, papules, ulcerations, or erosions, similar to that found in OLP; hence, the term “lichenoid” given to this reaction.^[4]

This case report describes a case of OLR associated with lozenges kept by the patient in the right buccal vestibule for sore throat.

Case Report

A 36-year-old female patient presented with a chief complaint of bleeding gums for 5 months. No history of tobacco chewing or smoking. She had given a history of gastritis for 4–5 years and was under medication for the same. The patient had also given a history of sore throat for which she had kept herbal cough lozenges (tablet Sualin) in the right lower buccal vestibule.

Intraoral examination revealed the presence of a reddish-white lesion on the right buccal mucosa, adjacent to the area of the buccal vestibule where she kept the lozenges. The lesion showed a reticular pattern with a reddish inflamed area surrounding it [Figure 1]. It was non-scrapable and tender on palpation. The patient was unaware of the lesion. The patient’s oral hygiene was fairly good.

A provisional diagnosis of lichenoid contact reaction on the right buccal mucosa was given, and differential diagnosis of chemical burn and oral candidiasis was given. The patient was asked to discontinue keeping the lozenges in the affected area. The patient was recalled after 1 week for reevaluation. The patient reported after a week, and there was decrease in the erythema and pain in the area [Figure 2].

Discussion

OLRs can be considered as a variation of OLP. They can be presented as a disease, or it can be an exacerbation of an existing OLP.^[5] Drugs such as nonsteroidal anti-inflammatory drugs, beta-blockers, oral hypoglycemics, dapsone, penicillamine, sulfonyleureas, and phenothiazines have been associated with lichenoid reactions.^[6] Apart from these drugs, OLRs have also been associated with dental materials such as amalgam, dental acrylics, and composite.

These reactions are usually seen in middle-aged individuals, with a slight female predilection.^[7]

OLRs can be classified into four types according to Van der Waal (2009), which are as follows:

- i. Amalgam restoration, topographically associated lesions,
- ii. Drug-related lichenoid lesions,
- iii. Lichenoid lesions in chronic graft versus host disease, and
- iv. Lesions that have a lichen planus like aspect but that lack one or more characteristic clinical aspects.^[8]

The typical clinical presentation of both OLP and OLR can be papules or plaques, reticular white patches, and plaques with or without ulcerations and erosions. OLP is a widespread condition which involves various anatomical sites within the oral cavity (or elsewhere including skin and genitalia) and is distinct from OLRs.^[9] The clinical diagnosis is often complicated because of the similar appearance of the oral lesions which can occur as a result of drug-related lichenoid reactions or as graft versus host disease, systemic lupus erythematosus, and discoid lupus erythematosus. Diagnosis in such cases is facilitated by a detailed history, clinical findings, and immunohistological findings.

OLRs caused by hypersensitivity to any drug or dental material or its constituents typically have anatomically a clear relationship to the offending agent, because of this reason these lesions are generally unilateral and not symmetrical. They are most commonly seen on the tongue and buccal mucosae where the covering lining mucosa comes in contact with the causative agent. In general, the sites such as palate, gingivae, or floor of mouth are further away from restorations or any dental material or drugs, so they are rarely affected. The patients having OLRs almost never have associated cutaneous symptoms. These clinical features help to distinguish OLR from OLP and also from the other conditions. The lesions are generally asymptomatic or occasionally, the patients may complain of tenderness, soreness, discomfort, or itching, especially with hot or spicy food. Certain oral complications such as metallic taste or dry mouth can be observed. There is controversy regarding the malignant potential

of lichenoid reactions, and it is generally assumed to be quite rare. However, the patients should be regularly monitored until the lesion resolves completely.

Conclusion

Local allergic reactions of lozenges and other pharmaceutical agents are rare, and when they occur, they can be eliminated by avoidance of that agent or replacing it with other non-allergic agents. In spite of similarity in clinicopathological features of the OLP, the etiology, diagnosis, and prognosis differ which mandates the separation of OLR from OLP. Hence, it is essential for the clinician and histopathologist to familiarize with the manifestations and individual variations among clinicopathological features of OLR.

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