

Psoriasis Of The Tongue: A Diagnostic Dilemma – Case Report

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Abstract

Subject: Psoriasis is a chronic, skin disorder with a genetic predisposition. Oral manifestation of psoriasis is a rare and controversial finding. Lesions are always a diagnostic dilemma.

Methodology: A clinical case of a 71-year-old male patient diagnosed with psoriasis is presented. He complained of a lesion on the tongue - a small area of ulceration, noticed about 2 years ago.

Results: Clinical examination revealed a lesion on the dorsum of the tongue, in its anterior aspect, with a centrally depressed area and leukoplakic changes at the periphery. The changes are non-typical and on this occasion the patient was recommended to undergo a biopsy for diagnostic purpose. Histopathological examination showed stratified squamous epithelium with a dense inflammatory infiltrate, acanthosis, areas with suprabasal detachment formation, as well as intraepithelial microabscesses with acantholysis.

Conclusion: The analysis of the clinical features and histopathological data in the presented case are consistent with psoriasis of the oral mucosa. It is a rare disease that is difficult to differentiate from other dermatoses with manifestations in the oral cavity. Therefore, it should be considered in the differential diagnosis of oral lesions.

Keywords: psoriasis, psoriasis of the tongue, oral lesions, oral mucosa

Introduction

Psoriasis is a relatively common chronic immune-mediated disease, known to be associated with a genetic predisposition (1). It mainly affects the skin and secondarily the joints, with lesions appearing as erythematous papulosquamous plaques (1). The color of the lesions could be red or pale pink. The plaques are usually distributed symmetrically, most often on the extensor surfaces of the elbows and knees, the scalp, the lumbosacral and umbilical regions (2). The histological finding is characterized by changes in the epithelial cells (similar to bullous lesions) and changes with advancing age of the patient and disease activity (3).

Psoriasis is most often diagnosed at a young age and occurs with periods of remission and exacerbation (4). The etiology of the disease is unclear, but the following risk factors are associated with the clinical manifestation of symptoms: trauma, infectious agents (streptococci, staphylococci, HIV, *Candida* spp., etc.), drugs, stress, smoking, alcohol intake, etc. (5, 6).

The most common form of psoriasis is psoriasis vulgaris, where typically plaques are detected. This variant of the disease is diagnosed in approximately 90% of cases (1).

Skin and joint lesions in psoriasis are well known and described in various literature sources. On the other hand, oral manifestations and mucosal lesions are still a subject of debate (7). For a long time, it was believed that the disease did not involve the oral cavity. According to recent data, oral lesions can be diagnosed, but they are a very rare finding (3). For the first time, Oppenheim (1903) (8) reported the oral form of psoriasis by histopathological examination.

A clinical case of a patient with newly diagnosed psoriasis and a tongue lesion that meets the criteria (clinical and histopathological) for oral manifestation of the same disease is presented..

Clinical case presentation

We present a clinical case of a 71-year-old male patient who was admitted to the Clinic of Maxillofacial Surgery in July 2023 due to the appearance of a lesion on the tongue - a small depression, first noticed about 2 years ago. He does not associate the appearance of the lesion with a specific event, but reports that due to the use of complete dentures, eating is difficult and he is sometimes biting the soft tissues. The patient reports that in August 2022 he has noticed an increase in the lesion, but has not yet undergone an examination and treatment on this occasion.



The patient was diagnosed with psoriasis in December 2022. There is an information in the medical history regarding alcohol consumption (300-400ml daily for over 15 years) and smoking (1 pack of cigarettes daily for over 40 years).

The clinical examination revealed bilateral telangiectasia on the skin of the face, probably alcohol-induced. The mouth opens freely. The upper and lower jaws are completely edentulous. A lesion is found on the dorsal aspect of the tongue - a depression, situated in its anterior part and slightly to the left of the midline. The lesion is markedly depressed in the center, with erosions in the area and peripherally we noticed white discoloration (leukoplakia-like) with superimposed radial grooves. The total size of the lesion is about 1.5 cm in diameter (Fig. 1). The lesion is clinically unspecified and cannot be interpreted unambiguously. No significantly enlarged regional lymph nodes are found on palpation.

Fig. 1 Clinical presentation of psoriasis of the tongue.

The patient underwent a biopsy and histopathological examination for the purposes of diagnosis and treatment. The presence of stratified squamous epithelium with a central erosive defect with an underlying dense inflammatory infiltrate of predominantly plasma cells and less eosinophilic and neutrophilic leukocytes was found. The surrounding epithelium showed acanthosis, areas of suprabasal detachment, and intraepithelial microabscesses with acantholysis. Diagnosis: The morphological finding is compatible with an oral presentation of psoriatic bullous dermatosis (Fig. 2 a-f).

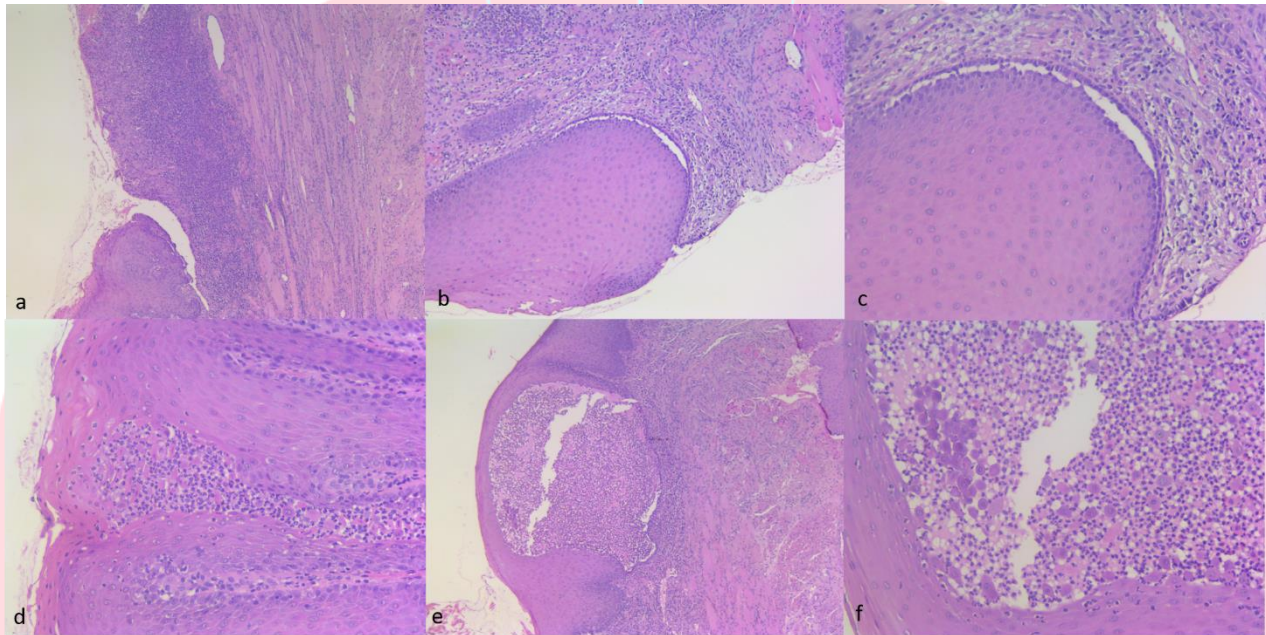


Fig. 2 a - erosive lesion of the oral mucosa with an intense mixed inflammatory infiltrate dominated by plasma cells; b, c - suprabasal acantholysis - the basal layer remains attached to the basement membrane (this finding requires a differential diagnosis with pemphigus vulgaris); d, e, f - intraepithelial microabscesses of neutrophilic and eosinophilic leukocytes with rare round acantholytic keratinocytes.

Discussion

Psoriasis is a relatively common chronic progressive immune-mediated disease, with genetic predisposition, occurring with remissions and exacerbations (9). About 1–3% of the world's population suffers from psoriasis (9). Due to the typical clinical presentation, it is often called a "disease of healthy people" (10).

The histological findings that are expected are parakeratosis, acanthosis, the presence of inflammatory cells (lymphocytes, polymorphonuclear cells, histiocytes), and spongiform pustules of Kogoj. Polymorphonuclear leukocytes migrate through the epithelium and can form typical intraepithelial microabscesses (Munro's abscesses). However, identification of Munro's abscesses is not mandatory for the establishment of the diagnosis (3).

A review of the literature reveals a lack of consensus regarding the association of oral lesions with a specific clinical type of skin psoriasis (11, 12). One study described a correlation between the presence of oral lesions and the dynamics of psoriasis, as assessed by the PASI – Psoriasis Area and Severity Index (12). According to other authors, the PASI scale cannot be used to objectively assess oral lesions (13). They reported that the most common oral lesions in patients with psoriasis are geographic tongue, lingua plicata, and the

presence of white plaque (leukoedema or fungal infection) (13). However, these lesions are not pathognomonic for psoriasis and are not found in all patients with the dermatological disease. Therefore, in patients with psoriasis, a strictly controlled examination for findings in the oral cavity that meet the clinical and histopathological criteria for psoriatic lesions on the oral mucosa should be made.

A clinical case of a patient with a lesion on the dorsum of the tongue, located in the anterior third of the tongue, near the tip, is presented. Clinically, the lesion consists of a central sunken area with erosions and a peripheral radially located whitish area with leukoplakia-like alterations. Since December 2022, the patient has been diagnosed with psoriasis and is undergoing treatment. Unlike most cases in which psoriasis is diagnosed at a young age (4), in the presented clinical case the diagnosis was established at the age of 70 years. Clinically, the lesion was difficult to assess and a neoplasm could not be excluded. On this occasion, an incisional biopsy was performed. The pathohistological result revealed a morphological finding compatible with an oral presentation of bullous dermatosis, and it cannot be distinguished from a psoriatic bullous lesion. The finding corresponds to the data in the literature describing the histopathological characteristics of psoriatic lesions in the oral cavity (3). The patient was referred for consultation with the attending physician to clarify the medication management. There is also data regarding habits - alcohol consumption and smoking. These are often suggested by various authors as risk factors for the manifestation of the disease (5, 6). The patient was recommended to control and stop the habits.

Oral psoriasis is a rare finding in dental practice and can be confused with other dermatological diseases with oral mucosal manifestations; therefore, it should be considered in the differential diagnosis of oral mucosal lesions and proven by biopsy and histopathological examination (2).

Conclusion

A clinical case of a patient diagnosed with psoriasis and complaining of a lesion on the tongue is presented. The clinical findings and histopathological examination confirm that the oral finding is a manifestation of the dermatosis. Dentists should be familiar with the signs and symptoms of psoriasis and oral lesions that can be found in patients diagnosed with the disease. It is important to consider it in a differential diagnostic aspect and compare it with other lesions from the premalignant and malignant spectrum. Patients should be given appropriate recommendations and the necessary consultations should be carried out.

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