

# Multiple Oral Ulcerative Lesions Bullous Pemphigoid: A Case Report

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## Abstract

Ulcerative lesions of the oral cavity are versatile. Autoimmune disorders like pemphigus present themselves with multiple different variants of ulcerative lesions. The diagnosis of such lesion at an early stage is very important to treat the disease condition faster and wiser. It affects the quality of life of patients. This paper pemphigoid case is discussed which was confined to the oral cavity. The final diagnosis was made using histopathology. Later the patient was given steroids and immunosuppressants for the management of the disease. Conclusion-Oral medicine experts or dentists play an important role in diagnosing autoimmune disorders. An early diagnosis and treatment can help the patient recovering soon and it also further improves the patient's quality of life.

**Keywords:** Autoimmune disorder • Pemphigus • Ulcers • Bullous pemphigoid

## Introduction

Ulcerative lesions in the oral cavity are very common. Clinical presentation of ulcers is different and found associated with various etiological factors sometimes idiopathic in nature. One of the autoimmune chronic diseases is pemphigus which has multiple clinical and histopathological variants. It is seen involving the whole body including the oral cavity. But in some cases, it occurs solely in the oral cavity. The characteristics of the disease are chronic ulcerative lesions with bleeding or crustations. The ulcers are severely painful and lead to alteration in speech, difficulty in having food or water, burning sensation, painful swallowing, and halitosis [1].

The dentist or oral medicine expert is a part of the oral health care system should have a good idea about such vesiculobullous disease which occurs in the whole body along with the oral or jaw manifestations. Hence, we report a case of bullous pemphigoid with oral manifestations [1,2].

In science we are presented with many opportunities to explore and research our existence. We can seize these chances or in most cases ignore them. If we decide to become involved in something new and unexplored, we must remember those great individuals who have come before us and established our current scientific protocols and methods. In the case of the contact lens burial simulation study, I was motivated by the work of Margaret Cox, Ph.D., a forensic archeologist, who postulated in her 2005 book, *Forensic Archaeology: Advances in Theory and Practice*, that contact lenses could be used as a forensic tool to identify unknown corpses that are retrieved at unmarked grave sites. Using well established scientific method guidelines, we were able to create a new scientific based protocol for the examination of contact lenses in a criminal case.

I am pleased to announce that one of my co-authors, Ms. Micah Lee was just accepted to the Brody School of Medicine at East Carolina University in North Carolina to pursue a medical career. As a physician/educator I feel a great sense of fulfillment in passing the baton of knowledge to the next generation. May she and her fellow colleagues continue this legacy and stand on our shoulders

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## Case Report

A 63 years old female reported to the Department of Oral Medicine and Radiology complaining of recurring oral ulcers for 2 years. The patient was well 2 years before, later she had ulcerations in the mouth with burning sensation and pain which used to aggravate while having hot and spicy food. Ulcers recur in a period of 1-2 months, cause difficulty in swallowing and speech. No history of bleeding or pus discharge. No history of swelling. No history of fever. The patient was on vitamin B complex, mucopain but does not found any significant relief. The patient was diabetic for 20 years on medication for the same metformin and glipizide.

On extraoral clinical examination of the patient left and right submandibular lymph nodes palpable, single in no., pea-shaped, slightly tender, and mobile. On intraoral examination of the first lesion ulcerative-erosive lesion seen surrounding the marginal and attached gingiva, inner (palatal) aspect of hard palate extending from 27 till 17 and marginal and attached gingiva of lower anteriors extending from 43-33. The lesion appears erythematous, smooth and shiny. On palpation the lesion was severely tender, bleeding on probing positive.

On intraoral examination of the second lesion-multiple ulcerative lesions were seen involving a posterior third of hard palate extending till the anterior border of soft palate irregular in shape measuring approximately 0.6 × 1 cm in size. The lesion appears whitish red covered with whitish necrotic slough with ill-defined erythematous margins and surrounding mucosa also appears erythematous. On palpation of the lesion was found to be severely tender, no bleeding or pus discharge was seen (Figure 1).

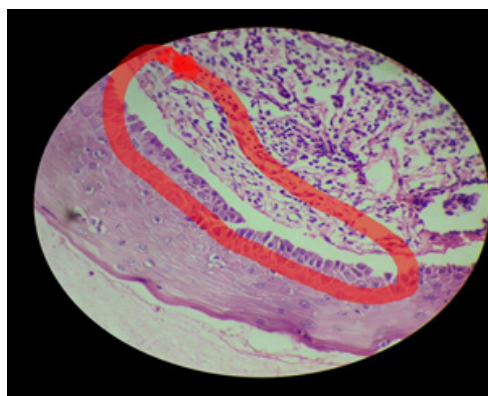
Further intraoral examination revealed decayed-27, missing-28, 26,15,16,17, inflamed marginal & attached gingiva Periodontal pocket-present in lower anteriors, generalised grade III recession.

Based on the intraoral presentation of the oral lesion the provisional diagnosis was given as pemphigus vulgaris. And the differential diagnosis was given as Erythema Multiforme, Major Aphthous Stomatitis, and Bullous Pemphigoid.

The patient was diabetic for 20 years and was on medications for the same including metformin and repaglinide. Complete blood investigations and incisional biopsy of the lesion were performed. The blood reports showed Hb-10 gm%, BT-2 min, CT-4 min, and Random Blood Sugar (RBS)-140. Incisional from the left buccal mucosa and skin biopsy was performed in the dermatology department. Histopathological reports showed stratified squamous epithelium showing subepithelial sub-basilar split suggestive of the bullous pemphigoid-like lesion (Figure 2).



**Figure 1.** Erosive lesion seen surrounding the marginal & attached gingiva.



**Figure 2.** Histopathological section showing subbasilar split.

For the treatment, both dermatologists and oral medicine made a team. The treatment protocol was as followed oral treatment included preventive oral prophylaxis, Tantum mouth wash gargle four times a day along with Tab Wysolone-20 mg (1-0-0) Tapering, Tab Imuran 50 mg (0-0-1), Tess ointment, Cap Rantac, and Syp Mucaïne gel.

## Discussion

Vesiculobullous lesions can be classified as an Intra Epithelial vesicles the lesion is formed within the epithelium Acantholytic vesicles this is because of the breakdown of specialized attachments called the desmosomes Non-acantholytic vesicles is usually in the viral infections because of the death or the rupture of the group of cells. Sub Epithelial Vesicles, lesions formed between the epithelium and the lamina propria eg: Erythema multiforme Pemphigoid, Dermatitis herpetiformis Epidermolysis bullosa [1-4].

Bullous pemphigoid is an affliction of elderly people, with onset usually after 60 years of age. The blister in the bullous pemphigoid is subepidermal with an intact and often viable epidermis forming the roof. It even starts with itching and a non-specific rash on the limbs that may be either urticaria-like or occasionally eczematous and rarely may simulate vesicular eczema. It is an autoimmune disease where the IgG antibodies bind to two main antigens: most commonly to BP230, and less often to BP180 at the basement membrane which leads to the activation of complement. This is, in turn, starts an inflammatory cascade causing the epidermis to separate from the dermis. The important point to notice in pemphigoid is antibodies titre does not correlate with clinical disease activity [2-6].

In the current case, the blisters stage was not seen actively the patient reported after the blisters were burst usually in the disease condition the lesion arises on erythematous and on normal skin and may be associated with dermal edema including the oral cavity. In cases of pemphigoid, the blisters are tense and dome-shaped, obtaining a diameter of many centimeters in nature along with coagulated fibrin. In the present case, the

histopathological report revealed the presence of fibro purulent exudate and the stroma shows loose to dense bundles of collagen fibers with both chronic and acute inflammatory cells predominantly neutrophils and lymphocytes [3-7].

The treatment protocol followed mostly is for acute phase, prednisolone or prednisone at a dosage of 40–60 mg/day is usually needed to control the eruption. The dosage is reduced as soon as possible, and patients end up on a low maintenance regimen of systemic steroids, taken on alternate days until treatment is stopped. Immunosuppressive agents such as azathioprine may also be required. Similarly for the current patient wysolone tapering dose was added along with azathioprine with mouth wash, gel, and paint. As the patient was kept on azathioprine her Liver function test and renal function were done monthly [3-8].

The cases of bullous pemphigoid run a chronic, sometimes self-limiting course over several months or years. If the disease is diagnosed at an early stage its management is easier. The disease duration is usually 3-6 years, with most patients achieving complete remission off treatment. So, diagnosing the disease at the early stage plays a huge role in managing the painful disease in minimum time [3-8].

## Conclusion

Autoimmune disease like pemphigus has varied features sometimes due to common presentation it's hard to diagnose the disease at earliest. To overcome such limitation a proper history, clinical presentation, and correlation is required. The most accurate investigation is biopsy and should be used as the choice of action which sets accuracy. For such disease conditions using a supportive team of dermatology for consultation can help in treating the patient safer and faster. Steroids are a proven boon for such conditions along drugs like azathioprine is a must to overcome the disease but the important point to consider is the safe and wiser use of immunosuppressants.

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