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Case Report

Manifestation of Vulgar Pemphigus in Eyelid Mucosa: Clinical Case Report

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Abstract

Pemphigus vulgaris (PV) is one of a group of rare diseases that can affect the skin and / or mucous membranes, presenting vesicullulosus lesions on the skin and buccal mucosa. Occlusion of the tear duct, subepithelial fibrosis, formation of the symblepharon and perforation of the cornea are also described in the literature. Patient RDB, 64 years old, female, white skin, native of the city of São Roque, State of São Paulo, attended the private dental office in the city of Sorocaba, complaining of ocular burning with the presence of blisters on the left eyelid mucosa, buccal cavity and on the skin presenting painful symptomatology. The presence of vesicular lesions on the left eyelid mucosa, was observed in the oral cavity. The lesions were predominantly ulcerated, sometimes bleeding on the tongue, jugal mucosa, gingiva, floor and lip. In the skin the bullous lesions were found in the abdominal region. In the intra-buccal examination, the presence of the positive Nikolsky Signal caused by friction in the jugal mucosa was observed. With the proposed treatment all the lesions in ocular, oral and skin mucosa regressed. After one year, the patient remains in good health and continues on medical and dental observation. There was no onset of new pemphigus lesions during this period. The Dentist should know the clinical manifestations of pemphigus vulgaris in the eyelid, oral mucosa and oral cavity, since these alterations precede the appearance of cutaneous lesions. Therefore this professional can be the main responsible for the diagnosis of the disease, providing a better prognosis for the patient.

Background

Pemphigus vulgaris (PV) is one of a group of rare diseases that can affect the skin and / or mucous membranes, presenting vesicullulosus lesions on the skin and buccal mucosa. Its incidence ranges from 0.42 to 1.62 cases per 100,000, affecting mainly adults with a mean age of 50 years and in both genders [1]. The term "pemphigus" comes from the Greek "pemphis", meaning blisters, the earliest reports of cases of the disease date back to the eighteenth century, when in 1971 Wichmann described the disease. Its etiology is autoimmune and its main clinical characteristic is the development of blistering of the skin and mucous membranes due to the abnormal production of IgG autoantibodies against glycoproteins (desmoglein 1 and desmoglein 3) present in the surface epithelial cell desmosomes. Autoantibodies inhibit the molecular interaction responsible for adhesion resulting in intraepithelial separation forming a blister [2,3,4,5].

The main clinical features of PV are the presence of superficial and irregular erosions and ulcerations. When the blister ruptures, it exposes an erythematous, extremely painful ulcerated base. After the rupture of the blisters follows a diffuse ulceration leading to debilitating pain, loss of fluid and electrolyte imbalance. When there is involvement of mucous membranes, the oral mucosa is the most frequent being identified in the palate, lip mucosa, belly of the tongue and gingiva regions. The involvement of the mucosa of the pharynx, larynx, esophagus, genital and ocular regions are less frequent. Skin lesions appear as vesicles and blisters that break rapidly leaving a bare erythematous surface [6,7,8,9, 1].

As for ocular manifestations, non-cicatricle conjunctivitis is the most frequent, and ulcerated lesions on the eyelid and ocular mucosa are uncommon. Occlusion of the tear duct, sub epithelial fibrosis, formation of the symblepharon and perforation of the cornea are also described in the literature. Chronic conjunctivitis leads to loss of goblet cells, resulting in a burning sensation and tearing of the eyes, often being

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discrete signs and symptoms. With the evolution of the disease in the ocular mucosa, the symptoms become more pronounced such as hyperemia, pain, photophobia, blurred vision, trichiasis, ulceration in the ocular mucosa and perforation of the cornea [10, 11, 8, 3].

Anamnesis, clinical examination, and semi-technical maneuver for detecting or not the Nikolsky signal is a major characteristic finding of pemphigus vulgaris. A blister can be formed if we perform induced pressure on the skin and / or normal lateral mucosa, but it is also not a pathognomonic signal because they are usually evidenced in other bullous vesic diseases, and as a consequence the PV can cause abundant salivation and fetid odor, resulting in difficulty in swallowing and phonation. It is common for PV lesions to appear on the buccal mucosa preceding skin lesions up to 4 months, confirming the prevalence of the disease in the oral cavity. The biopsy of the perilesional tissue is characterized microscopically by intra-epithelial separation above the basal layer of the epithelial cells, these cells remaining adhered to the underlying basement membrane and sometimes the superficial layer of the epithelium is desquamated leaving the cells of the layer Described as "tubular stone career". In the vesicular space can show degenerative changes, such as swelling of the nuclei, loss of desmosomes, rounded or ovoid shape and hyperchromatism called Tzanck cells. In the connective tissue we can find polymorphonuclear leukocytes and lymphocytes in varied numbers and scarcity of inflammatory infiltrate [7, 12, 5, 1].

PV is a differential diagnosis of several pathologies of autoimmune and vesicle-bullous origin, such as benign mucosal pemphigoid, systemic lupus erythematosus, epidermolysis bullosa, erosive lichen planus, erythema multiform, herpes simplex and zoster. [7,13,9].

The recommended therapeutic regimen for PV and being a systemic autoimmune disease should first be treated with systemic corticosteroid therapy, and this procedure may be associated or in combination with other immunosuppressants such as aziatropin and other alternatives include cyclosporine, cyclosporphamide, prostaglandin, chlorambucil levamizol And immunoglobulins. The expected outcome of the isolated or combined use of these drugs is the reduction of the production of autoantibodies. These therapies should be prescribed by a physician experienced in immunosuppressive therapy, and the Dentist plays an important role in the diagnosis and management of the case. Currently, low-power laser therapy combined with immunosuppressants becomes an effective and recommended alternative therapeutic option, providing improvements in the health and quality of life of patients. [13, 12, 14, 8, 15, 16].

Case report

Patient RDB, 64 years old, female, white skin, native of the city of São Roque, State of São Paulo, attended the private dental office in the city of Sorocaba, complaining of ocular burning with the presence of blisters on the left eyelid mucosa, buccal cavity and on the skin presenting painful symptomatology. The patient reported having consulted several professionals in the health area and has already used various medications such as Vitamin A, Pharmaton®, Colchicine® 0.5mg, B complex, Daktarin gel®, Meticorten® 20mg, Benerva®, Oncilon® (orabase), without good response to treatment.

The presence of vesicular lesions on the left eyelid mucosa (Figures 1 and 2) was observed in the oral cavity. The lesions were predominantly ulcerated, sometimes bleeding on the tongue, jugal mucosa, gingiva, floor and lip (Figures 3 and 4). 4). In the skin the bullous lesions were found in the abdominal region (Figure 5). In the intra-buccal examination, the presence of the positive Nikolsky Signal caused by friction in the jugal mucosa was observed.

In face of the clinical findings, the following diagnostic hypotheses were elaborated: Pemphigus vulgaris and benign mucosal pemphigoid. An incisional biopsy was performed in the lower lip region and the material was sent and processed, observing mucosa coated by squamous epithelium exhibiting acanthosis with an extensive cleft above the stratwm basale containing red cells and acantholytic cells, basal cells lined up, mild mononuclear exocytosis and lymphoplasmacytic inflammatory infiltrate in the basement membrane. The conclusion was Pemphigus Vulgarus confirming the diagnostic hypothesis.

After the disease was diagnosed by anatomopathological examination, the patient was referred to a dermatologist who

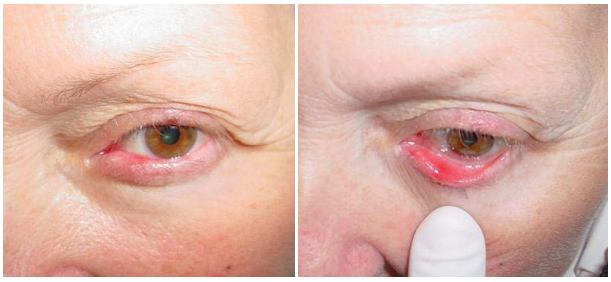
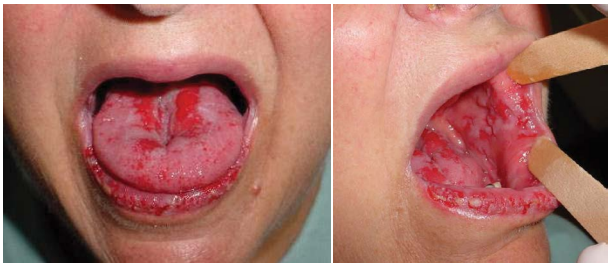


Figure 1 & 2 : Vesicular lesion on the mucosa of the eyelid.



Figures 3 & 4 : Ulcerated lesions on the buccal mucosa, the lip and the back of the tongue.

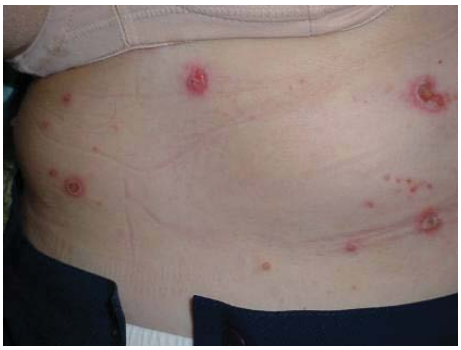
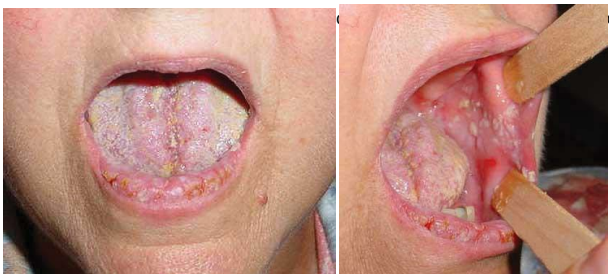
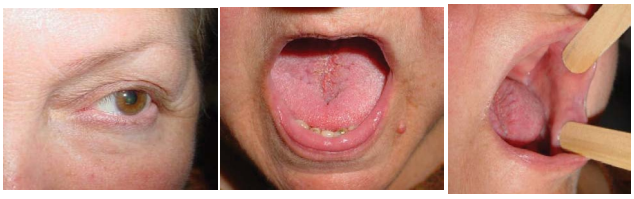


Figure 5 :Ulcerated skin lesions.



Figures 6 & 7: Candida Albicans infection 7 days after the start of corticosteroid therapy.



Figures 8, 9 & 10 : Complete remission of the lesions 1 month after the start of corticosteroid therapy.

instituted the following therapy: Decadron® (elixir), mouthwash 3x a day; Duodecadron® I.M (2 ampoules-1 month); Predisin® (20mg / day for 3 months, 10mg / day for 2 months and 5mg / day for another 2 months); Azithromycin 500mg for 7 days (for skin and abdomen lesions); Potassium Permanganate® (for skin lesions for 20 alternate days); Riprogenta® (corticoid and topical antibiotic as ointment for the skin). For ocular manifestation ocular lubricant and topical corticoid were prescribed.

After 7 days of initiation of treatment, the presence of pseudo-membranous candidiasis was diagnosed throughout the buccal cavity extension (Figures 6 and 7), and Nistatin® 100,000 IU (oral suspension) was administered 5 times a week. There was complete remission of lesions in ocular, mucosal and oral mucosa and in the skin, after 30 days of corticotherapy (Figures 8-10).

Discussion

Pemphigus vulgaris is an autoimmune disease characterized by the formation of blisters on the mucous membranes and skin. When ocular involvement is present, it exhibits an independent course of skin manifestations. Conjunctivitis is the most common manifestation followed by conjunctival eyelid erosion [10, 11, 8, 3]. The visual change may occur depending on the severity of the case. Adequate eye care is required in particular in infection prevention, scar development and corneal perforation. The treatment should have a multidisciplinary approach, involving a dermatologist, ophthalmologist and immunologist. Surgical treatment of trichiasis, poor eyelid position and perforation of the cornea are performed in the more severe cases of pemphigus vulgaris [11, 14, 15, 16].

The case reported had manifestation in the conjunctiva palpebral of the left side, through an erosion. Non-frequent manifestation, and after the institution of local and systemic corticosteroids, a complete remission of the condition was noted.

The ease of separation of the epithelial cells that this process determines gives rise to a clinical aspect of superficial desquamation, called the Nikolsky sign, which is characterized by the formation of blisters, which are characteristic of pemphigus. If you injure the normal buccal mucosa next to a pemphigus vulgaris lesion with a wooden spatula, for example, a hemorrhagic blister appears immediately after the injury and breaks in seconds. This semi-technical maneuver serves as a diagnostic criterion for autoimmune vesicular-bullous diseases. [6, 2, 8, 4]

As for oral lesions they are extremely sore to the point of preventing feeding, they bleed easily, usually have irregular borders and are covered by a white bloody exudate. These superficial, painful erosions that eventually coalesce and heal in a short period of time lead to greater tissue stiffness and also impair patient phonation. The skin can occur in any region of the body affecting more trunk and limbs, especially large areas of bending folds such as the neck. [6, 9, 4, 15, 17].

For definitive diagnosis, an incisional biopsy of a perilesional tissue should be performed and the clinical findings correlated with the microscopic aspects are usually sufficient since it provides nosological results. However, in some cases, direct and indirect immunofluorescence examinations of lesions and serum of patients may be used for confirmation. Histopathologically, there is intraepithelial blister formation, with the basement membrane remaining adhered to the underlying lamina propria. Isolated epithelial cells within the blisters, known as Tzanck cells, may also be observed, and the underlying connective tissue may present chronic inflammatory infiltrates of usually mild intensity [6, 7, 2, 9, 4, 1].

Prior to the introduction of the use of corticosteroids, about 40 years ago, pemphigus had a mortality rate of 70 to 95%, mainly due to dehydration and septicemia. Early diagnosis of the lesions, together with the immediate institution of treatment, are important prognostic factors, since they allow the possibility of establishing a lower dose of corticosteroids, minimizing their side effects. Today the mortality is approximately 10% of the patients with the disease.

Prednisone is, however, the drug of choice of most authors [14, 8, 15], whose maximum daily dose is 120 mg (1-2 mg / kg / day). However, several adjuvant therapies have been used in resistant lesions or aimed at reducing the steroidal dose and, consequently, its side effects such as the use of cyclosporine, cyclophosphamide and azathioprine [15]. The use of topical therapy of ocular and oral skin and mucosal lesions is necessary because of the pain and local discomfort patients feel. Another effect of the use of immunosuppressive drugs is the possibility of opportunistic diseases such as candidiasis and herpes, and new therapy should be instituted for these conditions [13, 14, 9, 15].

As the disease is multisystemic, the diagnosis and treatment are of multidisciplinary origin, and should be the patient assisted by Dentists, Dermatologists and Ophthalmologists. Another factor to be taken into account is the delay in the diagnosis of autoimmune diseases with manifestation in the oral and ocular mucosa, mainly due to the lack of preparation in the diagnosis of these diseases. In the case reported, this factor was well evidenced.

Conclusion

With the proposed treatment all the lesions in ocular, oral and skin mucosa regressed. After one year, the patient remains

in good health and continues on medical and dental observation. There was no onset of new pemphigus lesions during this period.

The Dentist should be aware of the clinical manifestations of pemphigus vulgaris in the eyelid, oral mucosa and oral cavity, since these alterations precede the appearance of cutaneous lesions. Therefore this professional can be mainly responsible for the diagnosis of the disease, providing a better prognosis for the patient.

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