CASE REPORT

We describe the case of a twelve-year old patient presented with a four-month history of painful coalescent ulcerations in the oral cavity and lips, including the tongue and palate, with edema, erythema, and crusts. Three months later, he presented erythematous vegetating ulcers on the basis of the penis and in the perianal region (Figure 1). He had no other complaints.

Laboratory tests resulted in normal complete blood count, complement, and immunoglobulins. Serology for viral hepatitis, syphilis, and HIV were negative. Tests showed high inflammatory activity. The ASCA test (ASCA IgG: 46.13U; IgA: 50.89U) was positive; the p-ANCA and c-ANCA tests were negative. Colonoscopy was normal.

Histopathology of the lower lip and of the lesions on the basis of the penis showed suprabasal acantholytic cleft and a mixed inflammatory process, with eosinophils. Skin fragments from the perianal region revealed epidermal hyperplasia, neutrophil abscesses, intraepithelial eosinophils, and a moderate mixed inflammatory process, with eosinophils on the dermis (Figure 2). Direct Immunofluorescence (DIF) was negative for immunoglobulin and complement deposits in the oral mucosa.

WHAT IS YOUR DIAGNOSIS?

FIGURE 2: A. Lower lip mucosa: suprabasal clefths and acantholytic cells, mixed inflammatory process with eosinophils. (H&E X 20). B. Skin of the basis of the penis: epidermal hyperplasia and suprabasal multifocal acantholysis formed by clefts where there are eosinophils and neutrophils; on the dermis, moderate mononuclear inflammatory infiltrate, with eosinophils and neutrophils. (H&E X 10). C. Perianal plaque skin: epidermal hyperplasia and intraepithelial voluminous abscesses. (H&E X 10). D. Detail of the abscess: neutrophilic infiltrate with numerous eosinophils and dissociated keratinocytes. (H&E X 40)

FIGURE 1: A. Lips: ulcerated crusted lesions in the lip mucosa; B. Basis of the penis: erythematous crusted plaques; C. Perianal region: vegetating erythematous plaque.
DISCUSSION

Based on the clinical presentation and histopathological findings, the main diagnoses considered were pemphigus vegetans (a variant of pemphigus vulgaris) and pyoderma-vegetans-vegetans (PD-PSV). The differentiation between them could only be made by immunofluorescence, since clinical presentation and histopathological findings are very similar in both diseases. Direct and indirect immunofluorescence (DIF and IIF) are negative or weakly positive in PD-PSV, whereas they are positive and reveal strong intercellular deposits of IgG and C3 in pemphigus vegetans. Considering that our patient’s DIF test was negative, we made the definite diagnosis of PD-PSV.

PD-PSV is a rare inflammatory disease characterized by pustular and vegetating plaques that affect the skin and mucous membranes. The etiology of PD-PSV is unknown, and its pathogenesis is poorly understood. It is associated with gastrointestinal disease and has been described as a highly specific marker for inflammatory bowel diseases (IBD). Diagnostic differentiation between PD-PSV and pemphigus vegetans is essential, even though immunosuppressant regimens would be similar. The association of PD-PSV with IBD is well known, and IBD precedes the onset of oral lesions by months or years in most cases. Ulcerative colitis occurs in 70-78%, and Crohn’s disease is seen in 11% of patients. In about 15% of cases, skin lesions precede gastrointestinal symptoms. Therefore, patients with PD-PSV must be monitored to detect the onset of IBD. There is not a single treatment protocol, and none of the treatment regimens presented solid scientific evidence of having superior efficacy.

The patient was treated with prednisone 1mg/Kg/day and azathioprine 1mg/Kg/day. Corticosteroid doses were gradually tapered and stopped at the end of six months. After normal dosing of glucose-6-phosphate-dehydrogenase, dapsone 100mg/day was introduced as a corticoid-sparing agent, and azathioprine was discontinued one month later. The patient showed improvement of the lesions, which was slower for the perianal plaques (Figure 3). The patient was followed up as an outpatient for nine months. After that, dapsone was discontinued. He took part in periodic screening protocols (clinical and laboratorial) for early detection of IBD.
Abstract: Pyodermatitis-pyostomatitis vegetans is a rare mucocutaneous dermatosis characterized by pustular and vegetating lesions of the skin and oral mucosa. It is considered a highly specific marker for inflammatory bowel diseases. The authors describe a case of pyodermatitis-pyostomatitis vegetans in a pediatric patient who presented marked clinical improvement after beginning treatment with oral corticosteroids, azathioprine, and dapsone. Bowel surveillance is mandatory, since the dermatosis is associated with inflammatory bowel diseases in more than 70% of patients, especially ulcerative colitis.

Keywords: Colitis, ulcerative; Crohn disease; Eosinophilia; Inflammatory bowel diseases; Skin diseases

Resumo: A piodermatite-pioestomatite vegetante é uma dermatose mucocutânea rara, caracterizada por lesões pustuloses e vegetantes na pele e mucosa oral. É considerada um marcador altamente específico para doenças intestinais inflamatórias. Os autores descrevem um caso de piodermatite-pioestomatite vegetante em paciente pediátrico, o qual apresentou boa resposta a corticoterapia oral associada à azatioprina e à dapsona. A vigilância intestinal é mandatória, uma vez que a dermatose está associada a doenças intestinais inflamatórias em mais de 70% dos casos, especialmente a colite ulcerativa.

Palavras-chave: Colite ulcerativa; Dermatopatias; Doença de Crohn; Doenças inflamatórias intestinais; Eosinofilia

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