INTRODUCTION

Vesiculobulous, erosive or ulcerative disorders affecting the oral mucosa or gingiva, as some forms of pemphigus and atypical forms of Recurrent Aphthous Stomatitis, may be very difficult to differentiate by clinical evaluation. Moreover, features such as history, patient’s age, type and location of the lesions, and clinical signs are more helpful than typical or atypical aphthous lesions. Pemphigus Vulgaris is the most common form of pemphigus and it frequently affects the oral mucosa1,2. The oral lesions generally precede the cutaneous disease and typically runs a chronic course attacking the non-keratinized mucosa, almost invariably causing blisters, erosions and ulcers3,4. Depending on their clinical stage, aphthous lesions in an atypical form (Fig. 1) may mimick autoimmune ulcers seen in PV or mucous membrane pemphigoid (MMP). Conversely, some lesions of PV may be solitary, affecting younger people than usual, and mimicking a simple aphthous lesion (Fig. 2). It is crucial to confirm the diagnosis of PV as early as possible, so that prompt and adequate treatment can be initiated, considering the severe prognosis of PV in advanced stages. Therefore, a complete history and clinical examination, biopsy with appropriate histopathologic and immunological investigation are often indicated.

Regarding the etiopathogenesis there are some controversies about immunological investigation in PV patients10,11,12. Despite the conflicting results, nowadays it seems to be a consensus that the etiopathogenesis of PV is related to a general immunologic abnormality that results in altered immune regulatory balance, where the ulcerative stage is related to the presence of intraepithelial CD8 T-cells without involvement of immunoglobulins13. It is well established that PV is an organ-specific mucocutaneous skin disease, where IgG auto-antibodies are directed against the extracellular domains of type 1 and 3 desmogleins, which promote cellular adhesion. The in vivo detection of these antibodies, associated to histological exam and the clinical manifestations, are crucial for diagnosis2.

OBJECTIVES

The present study was undertaken to compare patients with clinical suspicion of PV or RAS submitted to DIF, and to verify its relevance in the differential diagnosis between these two diseases, when considering recurrent typical or atypical aphthous oral lesions.

METHOD

Data from the patients, such as age and sex were collected. An experienced stomatologist (IDM) performed the clinical examination of the oral cavity in all patients. All patients underwent a biopsy of the peritissueal tissue in oral cavity, under local anesthesia. The specimens were obtained with a 5mm punch. Two fragments of mucosa adjacent to the injury were removed: the first fragment was sent to histological exam (in 10% formaldehde) and the second for DIF.

Specimens collected for DIF were placed on moistened gauze with physiological solution at 0.9% and immediately sent to the Immunopathology Laboratory – Hospital das Clinicas – Department of Dermatology, University of Sao Paulo Medical School. After histopathological results, the patients were grouped into two new groups:

1) PV group: confirmed by histopathologic diagnosis (acantholysis and suprabasilar cleavage).
2) RAS group: histological diagnosis of non specific oral ulcer.

RESULTS

In our study, RAS group was composed of 11 male and 17 female patients, ages ranging from 14 to 70 years (mean age= 28 ± 6.2). The PV group was composed of four male and 14 female patients, ages varying from 26 to 64 years (mean age = 49 ± 8.4). Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) and Relative Risk (RR) of the presence of positive direct immunofluorescence in the diagnosis of Recurrent Aphthous Vulgaris and of the absence of positive direct immunofluorescence in the diagnosis of Recurrent Aphthous Stomatitis were also calculated.

The results of the DIF exams for both groups were analyzed and statistically compared. Chi-square test was utilized, with a significance level of p < 0.05. Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) and Relative Risk (RR) of the presence of positive direct immunofluorescence in the diagnosis of Pemphigus Vulgaris and of the absence of positive direct immunofluorescence in the diagnosis of Recurrent Aphthous Stomatitis were also calculated.

CONCLUSION

The results we found in RAS group and PV group show that DIF is an essential tool to reach a differential diagnosis of these two diseases, notably in patients with advanced age with atypical RAS lesions, or in those with atypical clinical histories.

REFERENCES