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Oral Medicine and Pathology Quiz – Case 9

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A 69-year-old man was referred to our clinic for evaluation of multiple painful ulcers in his lips and mouth for the past 15 days. He also reported mild fever and malaise of similar duration. Administration of topical antifungal and antiseptic medications by his dentist did not improve the patient's condition. He was a non-smoker and his medical history was significant only for prostate hyperplasia controlled by alfuzosin. Moreover, one week before the onset of the lesions, the patient developed sore throat, which was diagnosed by his physician as tonsillitis and treated with clarithromycin, meloxicam and paracetamol. On clinical examination, the patient's lips were ulcerated with hemorrhagic crusts covering the vermillion border (fig. 1). Intraorally, multiple ulcers with irregular borders were seen, diffusely affecting the buccal, lingual and palatal mucosa (figures 2, 3). No skin lesions were noticed. Following a course of systemic and topical steroids along with topical antiseptics, there was significant improvement within the first seven days and complete resolution of the lesions after twelve days.

Comment

Erythema multiforme (EM) is a vesiculo-ulcerative mucocutaneous condition. Its etiopathogenesis is not entirely clear, but it is believed to be mediated by an immunologic process. Many triggering agents have been identified such as medication, particularly antibiotics and analgesics, and preceding infections, most often related to herpes simplex virus (HSV). These factors give rise to an immunologic derangement that elicits the disease process. Many patients report multiple recurrences of the disease, especially in cases of a viral origin.

Patients affected by EM are usually young adults, in their 20's or 30's, with a male predominance. EM is most often of acute onset and may display a wide variety of clinical symptoms. A prodromal stage of fever, malaise and headache is sometimes reported. The clinical manifestations may range from limited oral lesions to widespread involvement of skin and multiple mucosal surfaces. EM oral lesions usually present as painful diffuse ulcerations, sometimes preceded by vesicles, bullae or erythematous patches. The vermilion border of the lips may also be affected frequently covered by hemorrhagic crusts. Skin lesions vary in appearance, typically presenting as concentric erythematous rings, described as target, iris or bull's eye.

EM can be divided into several forms. The minor form of the disease is usually triggered by HSV or other infections, while the most severe forms usually represent a hypersensitivity drug reaction. EM minor is the milder form and affects only one mucosal site (usually the oral mucosa). If more mucosal surfaces are affected (usually the ocular and genital mucosa in addition to the mouth), the terms EM major or Stevens-Johnson syndrome (SJS) are used. There is a considerable overlap between these two conditions, but it has been proposed that SJS is more severe and affects at least three mucosal surfaces. On the clinical end of the spectrum of the disease, toxic epidermal necrolysis (TEN) is an extreme life-threatening condition, where diffuse sloughing of a significant proportion of the skin and mucosal surfaces give the patient's skin a scalded appearance.

The histopathologic and immunopathologic features of the disease are not pathognomonic, and serve only to rule out other

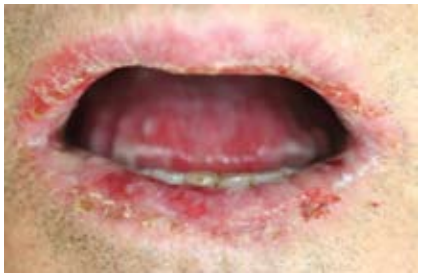

Figure 1

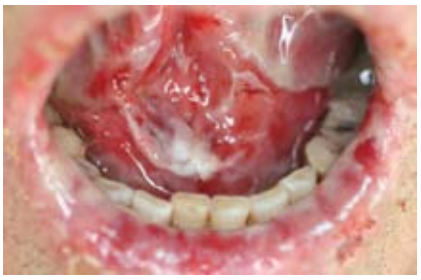

Figure 2

Figure 3

clinically similar vesiculobullous entities, such as pemphigus vulgaris. Histopathologically, subepithelial or intraepithelial vesicles may be noticed, along with basal cell necrosis, and a mixed, often eosinophilic and perivascular, inflammatory infiltrate.

EM is usually self-limiting, with a course duration of a few weeks. However, the most severe forms follow a more protracted course and may even be life-threatening. Symptomatic and supportive treatment may be sufficient in minor forms of the disease. In cases with significant involvement, systemic steroids are frequently administered. Moreover, dehydration of the patient must be prevented, sometimes by the means of intravenous solutions, along with the use of topical anesthetic agents to relieve the pain. Identification of any triggering agent is of paramount importance. If drug hypersensitivity is implicated, discontinuation of the medication is obligatory. In case of recurrent EM, a viral cause must be investigated, in which case prophylactic long-term antiviral medication may be administered.

References

1. WETTER DA, DAVIS MD. Recurrent erythema multiforme: Clinical characteristics, etiologic associations, and treatment in a series of 48 patients at Mayo Clinic, 2000 to 2007. *J Am Acad Dermatol* 2009, 6 [Epub ahead of print]
2. PATEL NN, PATEL DN. Erythema multiforme syndrome. *Am J Med* 2009, 122: 623–625
3. BORCHERS AT, LEE JL, NAGUWA SM, CHEEMA GS, GERSHWIN ME. Stevens-Johnson syndrome and toxic epidermal necrolysis. *Autoimmun Rev* 2008, 7:598–605
4. AL-JOHANI KA, FEDELE S, PORTER SR. Erythema multiforme and related disorders. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2007, 103:642–654

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Diagnosis: *Erythema multiforme*