**Abstract:**

Introduction: Erythema multiforme is a reactive inflammatory mucocutaneous disorder. It is classified into three groups: erythema multiforme minor, major and oral erythema multiforme. The oral mucosa is mostly involved. The etiology of this lesion varied from bacterial, viral or fungal infection to drug reaction.

The aim was to report a case of oral erythema multiforme related to drug intake, in order to highlight clinical and histological features in addition to therapeutic modalities of drug induced oral erythema multiforme.

Observation: A 74-year-old female patient consulted for painful ulcerations in the oral cavity, associated to burning sensation and inability to eat or swell for the past 8 days. After detailed anamnesis and clinical examination, the diagnosis of oral erythema multiforme related to drug intake was retained.

Discussion: oral erythema multiforme is a benign inflammatory disorder involving the oral mucosa with pathognomonic clinical and histological features. It may result from viral, bacterial or fungal infection and from drug intake reaction. The interruption of the implicated molecule associated to symptomatic treatment are the principal therapeutic modalities.

**Key words:** erythema multiforme, oral mucosa, drug, reaction.

**Introduction**

Erythema multiforme is an acute inflammatory mucocutaneous disorder, that can affect skin or mucous membrane or both. It's classified into two groups based on the severity and the number of mucosal sites involved. The first is erythema multiforme minor if ulceration involved a single mucosal site with typical skin target lesions. The second group is erythema multiforme major when lesions involve more than one mucous membrane with skin target lesions. A new category is described in case of absence of skin lesion called oral erythema multiforme. The oral mucosa is the most commonly affected mucous membrane. Oral manifestations of erythema multiforme are very frequent.

A case of erythema multiforme resulting from drug intake was reported, in order to highlight the close link between erythema multiforme and medicines consumption and detail the etiopathogenesis, the clinical features and the therapeutics modalities of this disease.

**Case report**

A 74-year-old female patient consulted with the chief complain of painful ulcerations in the oral cavity associated to burning sensation and inability to eat or swell for the past 8 days.

She was hypertensive treated by captopril®.

She gave a history of bronchial asthma for which she took two medicines: Salbutamol® 2mg / Theophylline® 100mg two weeks back, within 3 days she developed this oral lesion.

The extra oral examination showed extensive irregular ulcerations, cracking and fissuring with bloody crusting on the upper and lower lip. (fig.1)

The intra oral examination revealed extensive irregular ulcerations with erythematous borders, some erosions that correspond to broken blisters, in the buccal surface of lips, hard palate, right crest and dorsal surface of the tongue, in addition to a white coating revetment in the palate. (fig.2,3)

The coincidence between the incidence of the oral lesions and drug intake, besides to the pathognomonic clinical appearance of the ulcerations were in favor of the diagnosis of drug induced erythema multiforme.

The patient was advised to interrupt her medication with the agreement of his doctor who was recommended to substitute the molecule. A topical corticosteroid was prescribed.

A favorable healing was noticed within 7 days. At one Month follow up, the patient was completely asymptomatic. That’s confirmed our diagnosis. (fig.4,5)

**Discussion**

Erythema multiforme is a reactive mucocutaneous disorder that was first described by Hebra in 1866[1] affecting most often young adult people (20-40 years), however it may involve children in 20% of cases [2,3]. This inflammatory disorder is subclassified into three groups:

Erythema multiforme minor which was described by Hebra[2] and characterized by ulcerations involving single mucosal site associated to typical target lesions.

Secondly Thomas attributed the group of erythema multiforme major to ulcerations involving more than one mucous membrane with also skin target lesions [4]. Finally, for the lesions involving only the oral cavity, Kennett in 1968 classified them in a third category known as oral erythema multiforme [5]. In this last category, oral lesions have a predilection for the non-keratinized mucosa and anterior part of the oral cavity, with this order of frequency: lips 36%, buccal mucosa 31%, tongue 22% and labial mucosa 19% [6].

Oral manifestations of erythema multiforme are characterized by large irregular erythematous ulcerations with or without pseudo membrane or nonspecific hyperkeratotic plaques. In addition to the presence of bullae or just erosions corresponding to broken blisters. As specific hue to oral erythema multiforme, we noted usually some hemorrhagic crusts in the upper and lower lip [1,7,8].

For the etiology, erythema multiforme is usually related to an immunological reaction to bacterial (mycoplasma pneumoniae, mycobacteria, brucellosis), viral (herpes simplex, AIDS, adenovirus, enterovirus), or fungal infections (coccidioidomycosis, dermatophytosis, histoplasmosis) infections, radiation therapy, malignancies, emotional stress and drugs .as it was the case for our patient [9]. The most common drugs incriminated are: Sulphonamides, nonsteroidal anti-inflammatory drugs, carbamazepine, vancomycin, phenytoin, co-trimazole; barbiturak...[7,8,10,11]. Also, some bronchodilators and antiasthmatics can induce erythema multiforme as it was in our case in which we have the association between the bronchial asthma drugs intake and incidence of lesions.

The diagnosis of drug induced erythema multiforme is based on the pathognomonic clinical appearance and the distribution of the lesion, the positive drug history associated with the sudden onset of ulceration and the exclusion of other inflammatory vesiculobullous lesions having similarities with this pathology, such as pemphigus vulgaris, bullous pemphigoid, bullous lichen planus, primary herpetic gingivostomatitis, as it was the case with our patient.[1,7;8]

The confirmation of diagnosis requires anatomopathological examination. Biopsy is advised in early vesicular lesions and not in ulcerated ones since histopathologic appearance are non-specific.[8]

Histological features are characterized by perivascular mononuclear cell infiltrate and degenerative changes in the epithelium associated with intercellular or intracellular edema, acanthosis and hyperkeratosis of the epithelium with hemorrhagic crusts.[7]

Management of oral erythema multiforme involves the elimination of the underlying causes, as it was the attitude with our patient by substitution of the drug. It requires also symptomatic treatment depending on the severity of lesions. It can be treated palliatively with analgesics for oral pain, soothing mouth rinses, viscous lidocaine rinse, soft liquid diet with avoidance of acidic and spicy food. For secondarily infected lesions, systemic or topical antibiotics can be prescribed. Mostly, oral erythema multiforme lesions respond to topical steroids, prescription of systemic ones is recommended for more severe cases. [7,8]

**Conclusion**

Oral erythema multiforme is a benign reactive inflammatory lesion, presenting divers etiologies that should be taken into account while treatment. It has characteristic clinical appearance that can be confused with many other diseases. Therefore, a prudent clinical examination must be performed in order to precisely determine the diagnosis and the adequate therapeutic approach.

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Figure 1: Ulcerations, cracking and fissuring with hemorrhagic crusts on the upper and lower lip.

Figure 2: extensive irregular ulcerations with erythematous borders and some erosions in the buccal surface of lips.

Figure 3: Erosion and white coating revetment in the palate.

Figure 4, 5: complete remission of oral erythema multiforme lesions.

 

Figure 2

Figure 1

 

Figure 4

Figure 3



Figure 5