

## CASES FOR DIAGNOSIS

# Ulcer on the Tongue

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### Clinical History

The patient was a 48-year-old woman with no past history of interest. She was seen for an asymptomatic lesion on the tongue that had appeared 2 days earlier. She did not report any history of trauma, high-risk sexual practices, or previous similar lesions on the oral or genital mucosas.

### Physical Examination

An ulcer with a diameter of 2 cm and a raised, indurated border was observed; it was covered by a whitish pseudomembrane (Figure 1). There were no palpable locoregional lymph nodes and no other lesions on the skin or mucosas.

### Additional Tests

Basic laboratory studies, serology for sexually transmitted diseases, and culture of the lesion were performed; the results were normal or negative.

### Histopathology

There was a deep, diffuse, polymorphous infiltrate with neutrophils and abundant eosinophils (Figure 2). There were a few large mononucleated cells that showed no atypia and were negative for CD30.

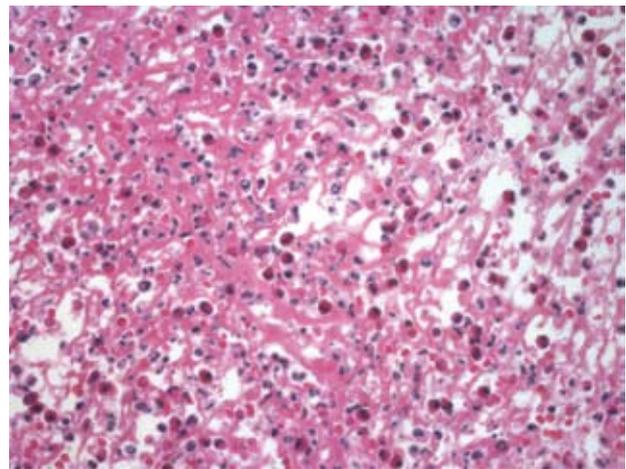


Figure 2. Hematoxylin-eosin,  $\times 250$ .



Figure 1.



Figure 3.

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What Was the Diagnosis?

## Diagnosis

Eosinophilic ulcer of the oral mucosa (EUOM).

## Clinical Course and Treatment

It was decided to keep the patient under observation and the lesion resolved spontaneously within a week, leaving no scar (Figure 3). There has been no recurrence of the disease after 12 months of follow-up.

## Discussion

EUOM, also known as Riga-Fede disease or traumatic ulcerative granuloma with stromal eosinophilia, is a rare disorder of unknown pathogenesis and with a self-limiting course.<sup>1,2</sup> It can appear in early childhood or in adults, and there is sometimes a history of trauma.<sup>1,2</sup>

Clinically it is characterized by an asymptomatic or painful ulcer of variable size, with raised, indurated borders, and covered by a whitish pseudomembrane.<sup>1,2</sup> It typically appears on the tongue, although it has also been reported on other areas of the oral mucosa. It has a self-limiting course, with spontaneous resolution in weeks or months.<sup>1,2</sup> Relapse is uncommon but possible.

Histologically there is a diffuse, polymorphous infiltrate with abundant eosinophils; the infiltrate extends deeply into the submucosa. In addition, a variable number of large mononucleated cells are frequently found, sometimes showing mitoses and atypia, and which can be positive for CD30.<sup>1-6</sup>

The pathogenesis of EUOM has not been fully elucidated and is a source of controversy. In our opinion, this debate has arisen because a number of disorders of different origins but which share the clinicopathological features described above are included under the same title of EUOM.

It has traditionally been related to oral injury due to the higher frequency of lesions on the tongue, its association with Riley-Day syndrome, and because histologically similar lesions can be provoked by causing injury to the tongue of experimental animals.<sup>1,2</sup> However, there are authors who do not agree with this association, as only 50% of patients refer a history of trauma, and the condition is rare despite the extraordinarily high frequency of minor trauma to the oral mucosa. Some authors suggest that trauma is simply a triggering factor that permits the passage of toxins or viruses that are actually responsible for the inflammatory reaction.

The origin of the large mononuclear cells has also led to controversy over the pathogenesis, as different immunohistochemical studies relate these cells to macrophages, myofibroblasts, and lymphocytes.<sup>5,6</sup> Cases have been reported with atypical CD30<sup>+</sup> T cells, even with oligoclonal/monoclonal rearrangement of the  $\gamma$  T-cell receptor; for some authors, these cases are true lymphomas whereas for others they simulate the histology of lymphoproliferative disorders.<sup>3-6</sup>

The differential diagnosis should include other erosive lesions of the oral mucosa, such as aphthosis, Behçet disease, various collagen diseases, vasculitis, herpes infections, and chancre. Two thirds of cases of EUOM are asymptomatic, as occurred in our patient, and this helps to distinguish it from aphthas and other painful conditions. It can also be confused clinically and histologically with squamous cell carcinoma, as well as with CD30<sup>+</sup> T-cell lymphoma, angiolymphoid hyperplasia with eosinophilia, and atypical histiocytic granuloma.

Treatment depends on a correct diagnosis and on the symptoms. It is possible to keep the patient under observation as the majority of lesions resolve in less than 1 month.

Follow-up will depend on the histological findings; if a lymphoproliferative disorder is suspected, the patient must be followed up periodically.

### Conflicts of Interest

The authors declare no conflicts of interest

## References

1. García M, Pagerols X, Curcó N, Tarroch X, Vives P. Eosinophilic ulcer of the oral mucosa: 11 cases. *Ann Dermatol Venereol.* 2002;129:871-3.
2. Labandeira J, Peteiro C, Toribio J. Traumatic eosinophilic ulcer of the oral mucosa: a misdiagnosed entity. *Cutis.* 1996;57:349-51.
3. Segura S, Romero D, Mascaró JM, Colomo L, Ferrando J, Estrach T. Eosinophilic ulcer of the oral mucosa: another histological simulator of CD30+ lymphoproliferative disorders. *Br J Dermatol.* 2006;155:460-3.
4. Serra-Guillén C, Requena C, Alfaro A, Hueso L, Sanmartín O, Llombart B, et al. Afectación de la mucosa oral por papulosis linfomatoide. *Actas Dermosifiliogr.* 2007;98:265-7.
5. Alobeid B, Pan LX, Miligan L, Budel L, Frizzera G. Eosinophil-rich CD30+ lymphoproliferative disorder of the oral mucosa: a form of "traumatic eosinophilic granuloma". *Am J Clin Pathol.* 2004;121:43-50.
6. Ficarra G, Prignano F, Romagnoli P. Traumatic eosinophilic granuloma of the oral mucosa: a CD30+ (Ki-1) lymphoproliferative disorder? *Oral Oncol.* 1997;33:375-9.