Traumatic Oral Ulcer

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Traumatic ulcers are lesions caused by external factors (mechanical, thermal, or chemical) associated with occasional or continuous trauma to the oral mucosa. Ulcerations caused by mechanical or thermal factors are more frequent and only regress when the traumatic factor is removed. On the other hand, ulcerations caused by chemical factors are less common.

Traumatic ulcers due to mechanical factors are usually associated with constant trauma of total removable prostheses, especially in elderly patients, but can also be seen as eosinophilic ulcers of the oral mucosa, which is a rare, benign, and self-limited condition and can often be confused as malignant ulcers. In these cases, histopathological findings after an incisional biopsy can confirm the diagnosis.

It is important to note, however, that when seen in neonates, these lesions have been called Riga-Fede disease. They are seen on the tongue of infants with

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(neonatal) teeth and develop by continuous contact between the tongue and teeth during physiological activities, such as breastfeeding and swallowing. They require intervention because they can interfere with the quality of feeding and cause a risk of nutritional deficiencies for the newborn.

1 Clinical Characteristics

1.1 Traumatic Ulcers

- Erythematous edges.
- A central region with fibrinopurulent membrane (Figs. 1 and 2).
- Symptomatic.
- Present in areas related to direct traumatic factors.
- The time of evolution depends on the intensity and frequency of these factors.

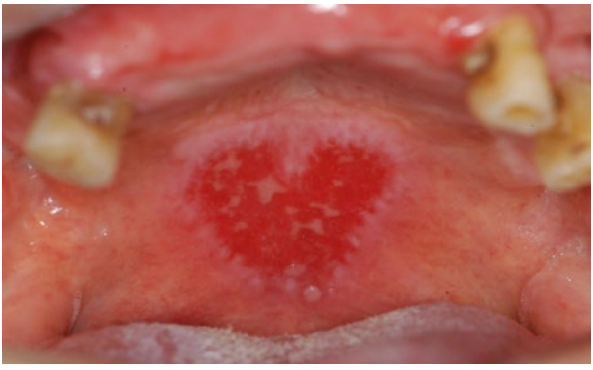

Fig. 1 Traumatic ulceration. Ulceration of the soft palate mucosa with the hyperkeratotic halo

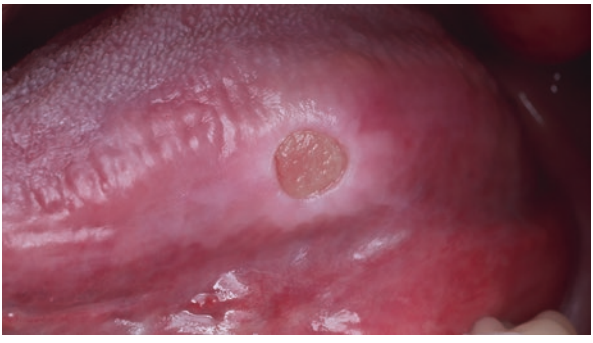

Fig. 2 Traumatic ulceration. Ulceration of the lateral border of the tongue with the hyperkeratotic halo. Courtesy of Dr. Diego Tetzner Fernandes

Fig. 3 Eosinophilic ulcer. Extensive mucosal ulceration of the soft palate on the left

1.2 Eosinophilic Ulcer

- Raised and hardened edges.
- White–yellowish background.
- Usually asymptomatic.
- It can remain for weeks to months.
- Frequently in the tongue, although some cases can be observed in the lip, palate (Fig. 3), buccal gingival mucosa, and floor.

1.3 Riga-Fede Disease

- Prominently raised border ulcer.
- Persistent.
- Often in the anterior ventral tongue.
- It may evolve into an enlarged fibrous mass.

2 Diagnosis

- Clinical features are the primary means of reaching a diagnosis.
- Some patients complain of altered sensation before the development of the ulcer.
- Investigate the use of drugs that can induce ulceration in oral mucosa:
  - Beta-blockers (labetalol).
  - Immunosuppressants (mycophenolate).
  - Anticholinergic bronchodilators (tiotropium).
  - Platelet aggregation inhibitors (clopidogrel).
  - Vasodilators (nicorandil).
  - Bisphosphonates (alendronate).
  - Protease inhibitors.

  - Antibiotics.
  - Nonsteroidal anti-inflammatory drugs.
  - Antirheumatics.
  - Antiretrovirals.
  - Antihypertensives (captopril, enalapril).
- Anemia, blood dyscrasias, autoimmune diseases, and diabetes were excluded.

3 Treatment

- Reinforce removal of removable prostheses.
- Incisional biopsy is indicated to exclude the possibility of malignant tumors in cases of eosinophilic ulcers of dubious appearance and nonobvious causes.
- Restoration and polishing of teeth associated with trauma (special attention when they are deciduous and not supernumerary, in Riga-Fede disease).
- Photobiomodulation.

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