

# Traumatic Ulcers

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## Background

Traumatic injuries involving the oral cavity may typically lead to the formation of surface ulcerations. The injuries may result from events such as accidentally biting oneself while talking, sleeping, or secondary to mastication. Other forms of mechanical trauma, as well as [chemical](#), [electrical](#), or [thermal](#) insults, may also be involved. In addition, fractured, carious, malposed, or malformed teeth, as well as the premature eruption of teeth, can contribute to the formation of surface ulcerations. Poorly maintained and [ill-fitting dental prosthetic appliances](#) may also cause trauma.

## Pathophysiology

Nocturnal parafunctional habits, such as bruxism (ie, grinding of the teeth) and thumb sucking, may be associated with the development of traumatic ulcers of the buccal mucosa, the labial mucosa, the lateral borders of the tongue, and the palate. In addition, local irritants such as fractured or malposed teeth and ill-fitting dentures may cause mucosal ulcers of the buccal mucosa, the lateral and ventral surfaces of the tongue, and the alveolar mucosa overlying the osseous structures. Healing of the ulcerated mucosa is usually delayed when the lesions overlie the maxillary or mandibular alveolar process. Ulcerations may be the result of voluntary, self-induced, and deliberate acts by patients with physical or psychological symptoms who are seeking medical attention. Butler et al report a patient with a congenital insensitivity to pain. The patient presented with self-mutilation bite injuries to the oral tissues and to his hands.<sup>[1]</sup>

## Epidemiology

### Frequency

#### United States

Although the exact incidence is unknown, traumatic ulcerations are considered the most common oral ulcerations.<sup>[2]</sup>

### Mortality/Morbidity

See the list below:

- Rarely, infection is a consequence of a traumatic event.
- Chronic ulcerations as a result of trauma (from fractured, carious, malformed teeth, as well as ill-fitting dentures) have not been associated with premalignant/malignant transformation in the oral mucosa.

### Age

See the list below:

- Newborns and infants: Sublingual ulcerations (as in Riga-Fede disease) may occur as a result of chronic mucosal trauma due to adjacent anterior primary (baby) teeth. The trauma is often associated with breastfeeding.<sup>[3, 4, 5]</sup>
- Children: The major traumatic injuries in this group include electrical and/or thermal burns of the lips and commissure areas. Extensive ulcerations with necrosis may develop. Children tend to be curious about electrical cords and other items unknown to them, and as they explore these items, they tend to put them in their mouth.
- Adults: Ulcers are typically the result of traumatic injuries related to carious, fractured, or abnormal teeth; involuntary movements of the tongue and mandible; ill-fitting maxillary and/or mandibular dentures; overheated foods; and xerostomia (ie, dry mouth).

### Clinical Presentation

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