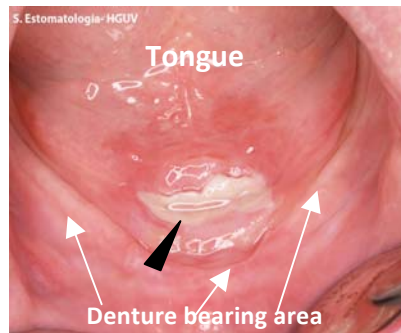


# Traumatic Ulcers



A Traumatic Ulcer is an open sore that can occur anywhere inside the mouth and is caused by trauma. It may be due to a single, but severe event (such as inadvertent chewing or biting of oral tissues) or, more frequently, to a repetitive minor trauma (poorly fitting dentures – figure 1, sharp teeth, etc). Other agents of a chemical or physical nature can also produce oral ulcers.



**Figure 1. Ulcer (black arrow) caused by an ill-fitting lower denture**

## ARE TRAUMATIC ORAL ULCERS FREQUENT?

It is difficult to establish their true frequency due the intermittent nature of these lesions and the different research methods used. They are the most common oral ulcers and represent one of the most frequent lesions of the oral mucosa. It is estimated that 4-8% of all adults present with traumatic oral ulcers and two out of every three such cases are related to dentures/ removable prostheses. Indeed, these are the most frequent oral lesions in patients with dental prostheses. One out of every five patients with removable dentures develops traumatic ulcers at some point, and the lesions are more common in patients with complete dentures than in individuals with partial dentures. The frequency is somewhat higher in children (about 15-20%). Three out of every four orthodontic patients suffer traumatic oral ulcers at some point, and in approximately 2.5% of the cases the lesions cause significant discomfort.

## WHAT ARE THE MOST COMMON CAUSES OF SUCH ULCERS?

1. Trauma caused by dentures/removable prostheses (Figure 2).
2. Self-inflicted injuries associated with various forms of mechanical traumatizing agents (fingers, nails, toothbrushes, toothpicks, pencils, etc.) (Figure 3).
3. Trauma caused by teeth (Figure 4).
4. Not-mechanical injuries (burns, etching).
5. Oral ulcers of unknown/undetected origin.



**Figure 2. An upper denture (black arrow) pressing on the tissue underneath causing a traumatic ulcer (white arrow)**



**Figure 3. Ulcer caused by biting the cheek (black arrow) and ulcer caused by a pencil (white arrow)**

### **WHAT MAY YOU FEEL OR EXPERIENCE IF YOU HAVE A TRAUMATIC ORAL ULCER?**

When you have a traumatic ulcer in your mouth, you may suddenly feel a sore and painful spot or area, often in the soft tissues of the cheeks, palate, inside the lips and on the lateral border of the tongue. Often a traumatic ulcer may be experienced in an area of the mouth where the soft tissue can come into contact with your teeth when chewing.

The area may be painful and have a rugged and elevated periphery and a central part very tender to touch. The periphery of the ulcer may also be white and flaky and the central part redder in color. Especially, when you eat, drink, rinse your mouth or brush your teeth you may feel an itching and/or burning sensation in the ulcer area. You may feel less discomfort when you do not move your mouth.

The symptoms of a traumatic ulcer will diminish and disappear over a period of one week. If you still experience symptoms after 7-10 days, you should see your dentist for an examination of the ulcer.

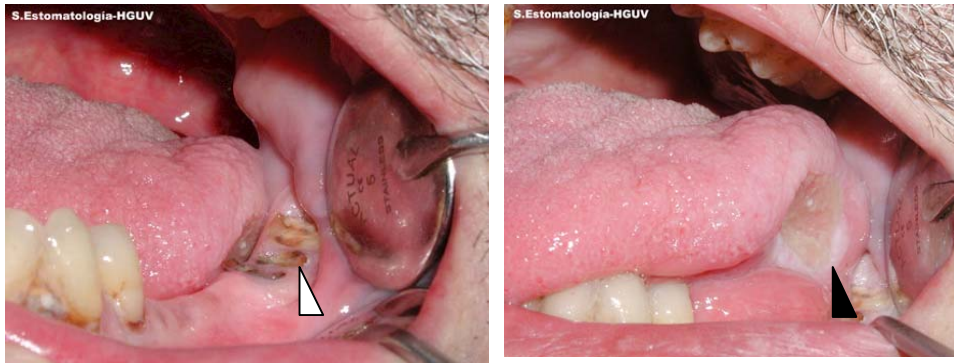
### **WHAT MAY YOU OBSERVE IF YOU HAVE A TRAUMATIC ORAL ULCER?**

You may observe a crater-like open sore, with a white or grey center, and a more or less inflamed border. Its size and shape depends on the characteristics of the related trauma. The ulcers appear more frequently on the lateral border of the tongue, inside the cheeks, and lips, usually in close proximity to teeth, dentures and orthodontic appliances.

### **WHAT ARE THE HEALTH RISKS OF A TRAUMATIC ORAL ULCER?**

The majority of traumatic oral ulcers are caused by physical injury mostly due to a local cause such as a sharp tooth fragment or restoration. The ulcers may cause local pain, particularly with hot, spicy or acidic (citric) foods, as well as some difficulty with speech and swallowing. However there are no known health risks associated with oral ulceration of physical origin.

Traumatic ulceration due to chemicals, for example by accidental or deliberate drinking of caustic agents can cause severe ulceration. Over the short term there will be a significant risk of the ulceration becoming infected but this is not expected to cause any significant health risk. Following healing any remaining scars could affect speech, eating and swallowing. This is unlikely to directly affect general health, though it will lessen an individual's quality of life.



**Figure 4. Dental roots with sharp edges (white arrow) causing ulceration of the tongue (black arrow)**

#### **WHAT SHOULD YOU DO IN THE CASE OF A TRAUMATIC ULCER?**

In order to cope with an oral ulcer, you should avoid having in your mouth salty or sour food or beverages. Many people use their tongue and teeth to “play” with the sore spot, and by doing so, they aggravate the ulcer. Other people may worsen the ulcer in other ways, such as picking at it with fingernails. It is strongly recommended to avoid such habits.

If you can clearly relate the ulcer in your mouth to a single traumatic event, such as accidental biting of the lip or taking into your mouth a very hot food or beverage, the ulcer will heal with no treatment within 7-10 days. If it does not heal within this period of time, you should visit your dentist and should let him/her examine your mouth.

If you think that the ulcer has been caused by a continuous irritation, such as sharpness of a broken tooth, roughness of a new filling or over-extension of a denture, the ulcer will not heal without treatment and may even become worse. In this case, it is suggested you call for an appointment with the dentist, without waiting for spontaneous healing, which probably will not occur. It is most likely that your dentist will be able to solve the problem right away.

If you are not able to recall any event responsible for the injury, a professional should diagnose the condition. For this purpose, it is recommended to see your dentist without delay, since some underlying illness may have led to the ulcer. Generally, the sooner such an illness is treated, the better and faster its treatment will be.

Leaflet published by the European Association of Oral Medicine and authored by:

Dr Adriana Argyriadou, England.

A/Professor Bente Brokstad Herlofson, Norway.

A/Professor Angel Martínez - Sahuquillo Márquez, Spain

A/Professor Radovan Slezák, Czech Republic

Dr Andy Wolff, Israel

Dr Rafael Poveda Roda, Spain