



*Marisa Roncati*

*Dentist, lecturer at the European Master Degree on Laser Applications (EMDOLA), La Sapienza University, Rome and University of Parma*

## *Canker sores and other oral injuries: reduce discomfort and speed up healing time*

*A simple canker sore can cause a truly disabling discomfort. Reducing the time of discomfort and at the same time accelerating the recovery time of health is an important clinical goal, certainly appreciated by the patient.*

*Through two experiences, the author describes the use and results obtained with a gel based on pesticides, an adjuvant in the processes of re-epithelialization and repair of the oral mucosa, capable of creating a protective, antiseptic and regenerating film on the soft tissues of the oral cavity (Hobagel Plus - Hobama srl, Milan).*

### **Case 1**

For a few days Annamaria has been unable to speak or eat due to severe pains in the mouth, and not only. Her neck also hurts, but above all she has swollen lymph nodes. He tries to endure hoping that the problem will resolve itself, but in the end he calls his general practitioner because the discomfort is expanding more and more in the head and neck area. However, Annamaria only manages to obtain a prescription for an antibiotic and a painkiller, as she cannot be seen by the doctor.

Even after taking the prescribed medications, the pain persists in the following days, the swelling does not subside, and the lymph nodes continue to be thick. All this frightens Annamaria, who decides to call me to the clinic. I receive it immediately.

Gently I insert the mirror and an assistant helps me. With gauze I move my tongue and I see a reddened area surrounded by a white frame. The diagnosis was immediate: "Dear Annamaria, you only have a canker sore, a small lesion inside your mouth (Fig. 1)". I can do a simple laser treatment that reduces the discomfort and then I recommend applying a gel, very sticky and soothing.

If I hadn't had the laser, I would still have recommended this gel to be applied several times a day. Annamaria immediately felt better, certainly also reassured by my diagnosis. She returned the next day for a brief treatment and control of the canker sores. Reached by phone in the following days, she confirmed that she was now able to

eating and working without stress (so to speak... perhaps it was stress that caused her such injury!). In my clinical experience, I have had several cases similar to that of Annamaria, in which the patient complained of disabling pain, for reasons that were not well identified, even for several days, with deleterious effects on the quality of his life. Video 1 illustrates the treatment of aphthous lesion with a 980 nanometer diode laser and a 400 micron optical fiber. The diode laser insert must be kept in motion by drawing small circles that are not in contact with the lesion for at least one minute at a power of 1.2 watts in continuous mode. After that, it is necessary to make a second pass, with short touches, keeping the insert tangent to the lesion and not perpendicular, to protect the patient's comfort. In addition, always with the aim of causing the least inconvenience, it is recommended to use

compressed air from the dental unit syringe for a cooling action that soothes discomfort. It is appreciated how laser treatment has the effect of drying the aphthous lesion, which appears more wrinkled, accelerating its healing. The treatment was completed by generously applying Hobagel Plus by the clinician or caregiver using a cotton swab (Fig. 2, video 2). The product has an excellent substantivity so it stays in place easily. If indicated, the patient can rinse before applying the product, to avoid doing so later, by diluting the coated product.

In the absence of laser, this product was the most effective in the clinical experience of the Author and from what was reported by patients who tried it (video 2).

It is crucial that the ASO provides detailed guidance and suggestions on the use of the product. In the case of canker sores, it is recommended to apply them differently.



Fig. 1 Aphthous lesion diagnosed in Annamaria, on the lateral edge of the tongue in the posterior area,



Video  
1

responsible for the patient's inconveniences. The periodontal probe assesses that the lesion has a size of about 3 x 4 mm.



Fig. 2 The gel is applied to the canker sores with a cotton swab.



Video 2

if times a day, at least 4-6. It is recommended to give the patient a paper note as a reminder to purchase the product, which does not require a medical prescription.

#### Case 2

The clinical images in figure 3 refer to a patient who complained of irritation and burning in several parts of the mouth. This symptomatology was then localized in the alveolar mucosa of the

lower lip at the time of the visit (Fig. 3a). The patient reported that he had tried various chlorhexidine-based products or other antiseptic medicines at the suggestion of his pharmacist, but did not feel any relief. Figure 3b shows recovery three weeks later.

The patient reported that, from the first applications of the gel (Fig. 4), he had had complete remission of the algic symptoms and the lesions had disappeared within a few days.



Figs. 3a,b Pre-treatment clinical appearance (a) and after 3 weeks after use of the gel (b).



Figs. 4a,b The clinician applies the gel to the oral lesion very generously with a cotton swab.

## Bibliography

1. Scotti F, Decani S, Sardella A, Iriti M, Vanoni EM, Lodi G. Anti-inflammatory and wound healing effects of an essential oils-based bioadhesive gel after oral mucosa biopsies: preliminary results. *Cell Mol Biol (Noisy-le-grand)*. 2018 Jun 25; 64(8):78-83.
2. Gola G, Gallo F. Clinical effects of applying an innovative bioadhesive gel in the nonsurgical treatment of chronic periodontitis: a randomized split mouth trial. *Quint Internaz & JOMI* 2018;1:24-30.
3. Ring T, Scarnò D, Manera F, Scaramuzza E, Chiapasco M. Comparison between a bioadhesive gel (HOBAGEL) and chlorhexidine in healing after avulsion of lower third molars". *Quint Internaz & JOMI* 2017;4:26-33.
4. Roncati M, Gola G, Carinci F. Microbiological status and clinical outcomes in peri-implant mucositis patients treated with or without adjunctive bioadhesive dental gel. *HDM* 2015; 14(1):49-54.

## Further reading

You won't have any other teeth  
*Authors: Marisa Roncati, Giangi Cappai*

Non-surgical periodontal therapy  
*Author: Marisa Roncati*

Peri-implant health and diseases (Coming Soon)  
*Author: Marisa Roncati*

You can find it on the  
[www.quintessenzaedizioni.com](http://www.quintessenzaedizioni.com)  
website

