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THE COMBINATION OF ANTIFUNGAL, ANTIBIOTIC, ANTI-INFLAMMATORY AND ANTIHISTAMINE COMPOUNDS HAVE PROVED EFFECTIVE IN TRAUMATIC ULCER RECOVERY

It is not rare to hear new patients complaining about the manifestation of traumatic injuries right after having fixed orthodontic appliances installed. There are several strategies used by orthodontists aiming to minimize these manifestations, such as installing the appliances in stages — thus allowing the patient to get used to them — as well as using orthodontic wax in order to protect areas that may suffer trauma. However, what can be done when traumatic injuries appear anyway? We often use an ointment that has become popular in Dentistry and is made from triamcinolone acetonide which is a synthetic corticosteroid with anti-inflammatory, antipruritic and anti-allergic actions. Yet, these medications still need improvements, especially in regard to the speed in solving such problems (Fig 1). Following this perspective, American researchers have developed a topical powder made of antifungal, antibiotic, anti-inflammatory and antihistamine compounds with promises of providing this improvement. In order to evaluate the effectiveness of this new compound, American researchers conducted a controlled and randomized clinical study¹. The results achieved were promising, as this new compound led to a quicker resolution of traumatic injuries when compared to the placebo group.

WHEN THINKING ABOUT CLASS II SKELETAL CORRECTION IN YOUNG PATIENTS, EXTRAORAL APPLIANCES ARE UNANIMOUS AMONG ORTHODONTISTS

The excellent results achieved with extraoral appliances for Class II malocclusion correction in young patients are no surprise to anyone. As a result, these devices have become the gold standard for correction of this kind of malocclusion. However, the anti-esthetic component of this device is not well accepted by patients. Consequently, other treatment modalities arose, such as mobile and fixed functional appliances, intraoral devices that do not compromise facial esthetics. But what do orthodontists feel regarding the correction of Class II? Would functional appliances really have taken the space and preference of extraoral devices? Seeking to answer this question, American researchers² developed a study with an online questionnaire sent to 1,000 American and Canadian orthodontists. The results showed that despite there being a reduction in the use of extraoral devices, 62% of orthodontists believe that treatment with these devices is feasible, and choose it to treat this malocclusion. These results are important and should be used when presenting treatment plan to patients and caregivers, since the patient must be motivated to accept the best treatment.

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Figure 1 - Clinical presentation of ulcers from wire pokes (top panel) and injuries other than wire pokes (bottom panel) (Source: Rennick et al¹, 2015).

ORTHODONTIC PATIENTS PRACTICING PHYSICAL EXERCISES SHOW LOWER PAIN LEVELS AND USE OF ANALGESICS

The benefits achieved with regular physical exercise are already well established in contemporary society. Those benefits go beyond the limits of the body, also improving self-esteem and general well-being as a result of nor-adrenalin and serotonin regularization. Some studies also attribute improvements in pain level perception between practitioners of physical exercises. From this perspective, the following question arises: Would practitioners of physical exercise be more pain resistant when using orthodontic appliances? In this line of thinking, Indian researchers have developed a clinical study³ in which patients had orthodontic elastic separation installed in the first molars and were asked to answer a questionnaire about the perception of pain and analgesic consumption during this period of treatment. The results were revealing, since physical activity had a significant influence on the perception of pain and

analgesic use among adolescents undergoing orthodontic treatment. The authors highlight the need for further research to elucidate the results they found, since there is no justification for such results.

A SINGLE LASER DOSE REDUCES PAIN DURING CANINE RETRACTION

When activating orthodontic appliance, pain is a frequent complaint among orthodontic patients worldwide. Post-activation pain and esthetics of orthodontic appliances are factors that discourage patients to begin orthodontic treatment. The esthetics of devices is improving constantly. However, what could be improved with respect to pain? We saw in the previous text that physical exercise enhances pain tolerance, nevertheless, what could be done for the remaining patients? With this in mind, Iranian researchers developed an original clinical study⁴ in which they evaluated the effectiveness of helium-neon laser (HeNe) in reducing pain during

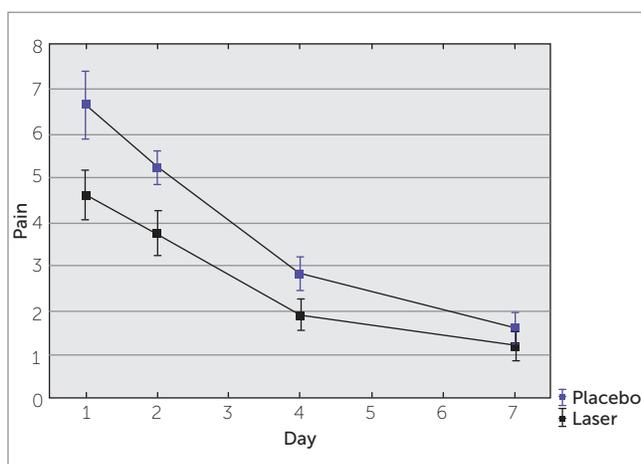


Figure 2 - Pain levels on each side evaluated, every day – error bars represent 95% confidence intervals (Source: Sobouti et al,⁴ 2015).

mechanical retraction of canines. The results showed that a single HeNe laser dose is able to reduce the pain (Fig 2). The authors note in their conclusion that regardless of the presence or absence of laser therapy, in these cases, pain can decrease considerably after one week, although not being completely eliminated during this period.

TEETH PROJECTION DOES NOT INCREASE THE RISK OF GINGIVAL RESSION

As we all know, Orthodontics is based on the pursuit of esthetics, function and stability after orthodontic treatment. Correct tooth inclination with the maxillary bone is key to achieve these precepts. Nonetheless, we often come across borderline cases in which the first option would be surgery; yet this is not accepted by the patient, thus requiring us to compensate for occlusion improvement. From this perspective, a question always arises: What would periodontal damage be when projecting lower incisors? In the search for answers to this question, Dutch, Czech and Swiss researchers developed this study.⁵ The results found by the authors implied that proclination of lower incisors did not increase the risk of gingival recession development during a five-year observation period compared to non-proclined teeth. Despite these results, it is always important to evaluate each case separately, so as to avoid the occurrence of unexpected results.

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