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TWITTER USERS HAVE THE SAME FEELING ABOUT THE USE OF BRACES OR INVISALIGN

Social networks grow exponentially by disseminating knowledge and relevant information in all areas of knowledge. Among social networks, Twitter stands out as a tool for long-range and rapid exchange of interpersonal information. These characteristics make Twitter an important orthodontic scientific tool, which can be used in the search for answers regarding orthodontic treatments and their results. Using this media, American researchers developed a study¹ with the proposal of evaluating the experience of orthodontic patients using fixed orthodontic appliances, compared to those using Invisalign, through the Twitter Sentiment Analysis. A customized program was created to collect tweets containing the words “brackets” or “Invisalign” during a 5-month period. At the end of the collection, it was concluded that Twitter users have more positive than negative feelings about orthodontic treatment, and did not present significantly different feelings regarding the use of conventional brackets or Invisalign.

USE OF ULTRAVIOLET LIGHTS FACILITATES REMOVAL OF ORTHODONTIC COMPOSITE WITHOUT ENAMEL DAMAGE

The stage of orthodontic appliances removal is very much desired and celebrated by patients, yet, it requires a great deal of care from us, orthodontists, in order to return to the patient the integral enamel, as it was at the beginning of the treatment. For years, researchers from all over the world have been involved in the quest for tools and devices that could be used to

minimize the damages caused by the removal of composite adhered to teeth after orthodontic treatment. Laser, heat emitting equipment, and drills in the most diverse configurations have already been used. Recently, ultraviolet-sensitive orthodontic composites have entered the market —in other words, in the presence of ultraviolet (UV) lights, the composite is illuminated, thus, facilitating its removal. However, despite the information provided by the manufacturers, there was no evidence in the literature that actually confirmed the benefit of the composite being sensitive or not to UV light. Searching for evidences thereupon, Brazilian researchers developed a study² in which they evaluated the composite remnant, and the enamel damage when the composite was removed, in the presence of ultraviolet light and normal light (Fig 1). The authors concluded that the use of UV light associated with a fluorescent adhesive, compared to conventional lighting, allows for its efficient removal without causing enamel damage.

TREATMENT OF CLASS II MALOCCLUSION WITH A MANDIBULAR PROTRACTOR HAS A POSITIVE EFFECT, ON THE EVALUATION OF LAYMEN AND ORTHODONTISTS

The search for devices that do not compromise the aesthetics of the individual has become increasingly common. Following this trend, mandibular protractors have never been as fashionable as they are today. Although we know that the gold standard for correction of Class II malocclusion is to use extraoral appliances, protractors also have indications, and when well indicated, they have shown good results in the

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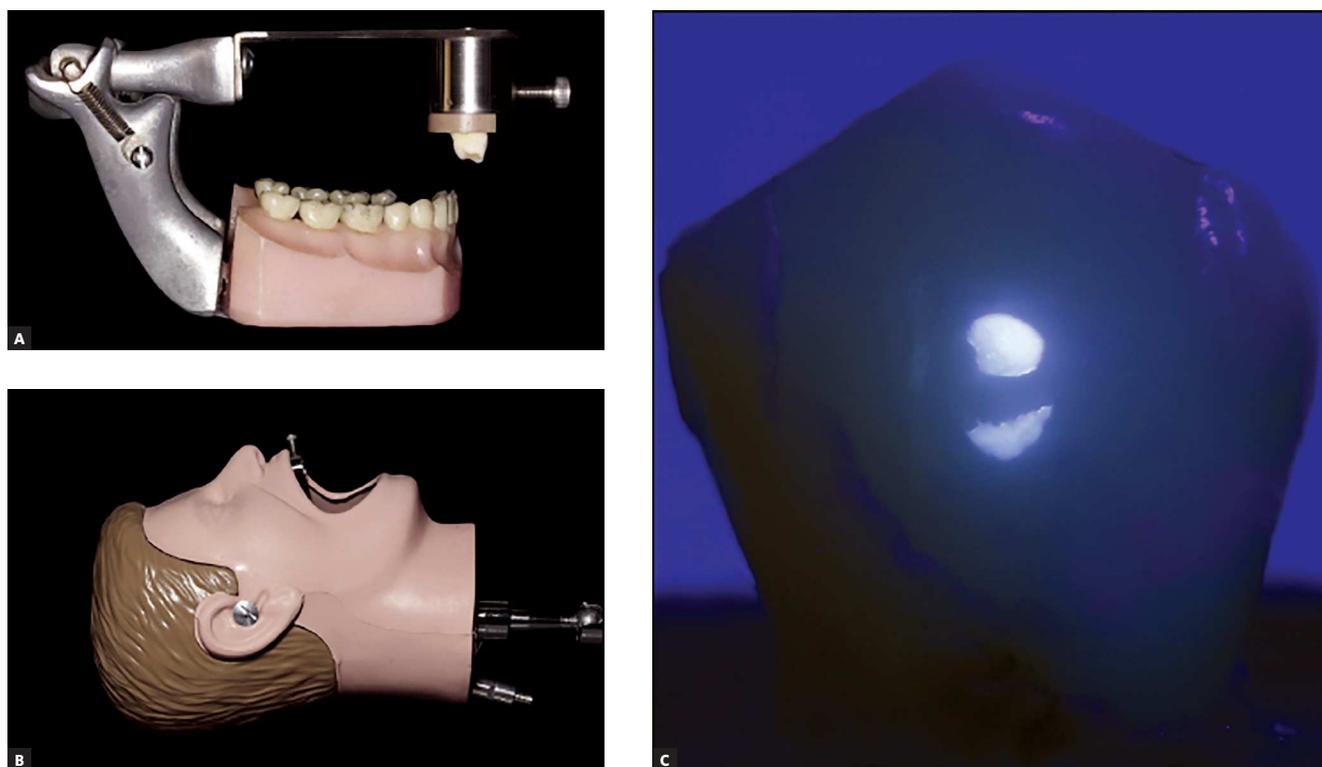


Figure 1 - A) Mannequin with bonded specimens. B) Mannequin head with bonded specimens, for composite removal. C) Specimen exposed to ultraviolet light used to measure the area of adhesive remnant (Source: Ribeiro et al,² 2017).

correction of this malocclusion. However, doubts hover in the air regarding the actual skeletal correction and, consequently, the facial improvement in the individuals treated with these devices. In the search for a response to this question, Brazilian researchers developed a study³ where they evaluated the aesthetic effect of correction with a mandibular protractor device from the perspective of orthodontists and laymen. For this purpose, a questionnaire was created containing profile silhouettes of treated and untreated patients (Fig 2) that were evaluated by orthodontists and laymen. After extracting the data, the authors concluded that treating Class II patients with the combination of mandibular protractors and fixed corrective orthodontics has a positive effect on facial silhouettes, according to the point of view of orthodontists and laymen.

NANOSILVER COATED ORTHODONTIC BRACKETS SHOW UP AS A NEW PERSPECTIVE IN PREVENTING WHITE SPOT LESIONS

After a corrective orthodontic treatment with fixed orthodontic appliances, the least desired is the presence of white spot lesions, since patients are looking for

functional and, mostly, esthetic improvements. The presence of white spot lesions on the enamel interferes with smile aesthetics, compromising the smile newly freed from the orthodontic accessories. Although patients are responsible for their oral hygiene, we, dentists, play an important role in its maintenance, encouraging the patients and using resources that minimize the appearance of white spots. Different cements, composites and varnishes are commonly used with this proposal. In recent years, however, there have been many studies on the addition of silver nanoparticles to dental materials due to their bacteriostatic power. Following this trend, the idea of covering the brackets with it has arisen. But would this coating be capable of minimizing bacterial proliferation around orthodontic accessories? In the search for an answer to this question, Turkish researchers developed a study⁴ whose objective was to evaluate the antibacterial properties and the release of ions of nanosilver coated brackets compared to conventional brackets. The authors of this study concluded that nanosilver coated brackets used as an antibacterial agent could be useful in the prevention of white spot lesions during orthodontic treatment without the patient's compliance.

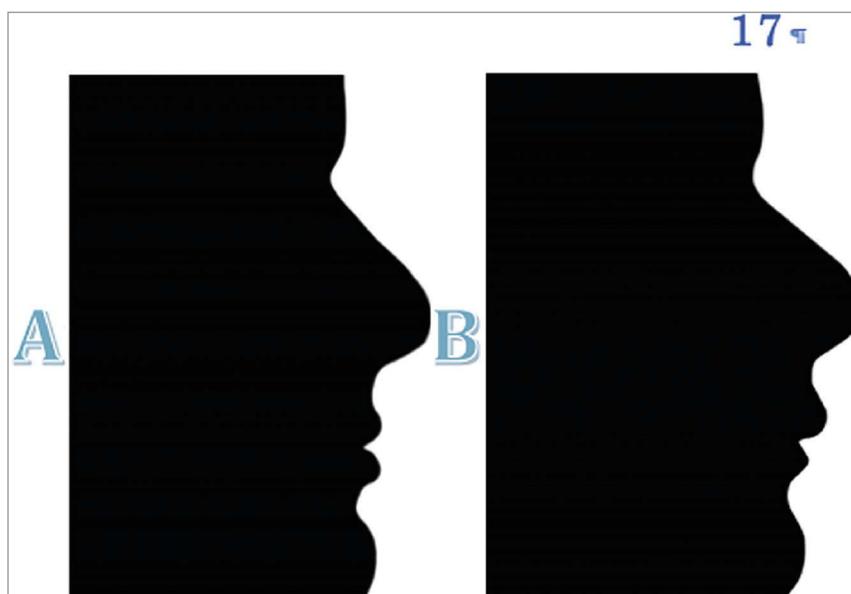


Figure 2 - Silhouettes of a patient's profile **A**) post-treatment; **B**) pretreatment (Source: de Paula et al.³ 2017).

THERE IS NO SCIENTIFIC EVIDENCE SUPPORTING THE MINIMALLY INVASIVE CORTICOTOMY PROCEDURE

The dream of being able to perform orthodontic treatment in a shorter time enhanced the development of techniques and procedures throughout history. Nowadays, corticotomy is seen as the most scientifically proven method for accelerating orthodontic tooth movement. However, this technique is invasive and may lead to bleeding, bone and gingival loss, among other complications. In order to promote improvement, minimally aggressive corticotomy has emerged. As its name suggests, this technique reduces the extent of bone lesion, promising the same efficiency as traditional corticotomy. However, the question arises: will minimally invasive corticotomy make the orthodontic movement as fast as when the conventional technique is applied? Searching for a response to this clinical question, Syrian researchers developed a systematic literature review with meta-analysis.⁵ The authors concluded with the study that there is a limited amount of evidence regarding the effectiveness of acceleration when using the minimally invasive technique. Still, the results of this review could prove that this procedure is suitable for cases of canine retraction acceleration. The authors draw attention to the fact that more research is needed to clinically indicate this procedure.

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