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ORTHODONTIC TREATMENT IS NOT A RISK FACTOR FOR THE DEVELOPMENT OF GINGIVAL RETRACTION

The benefits of orthodontic treatment vary. These benefits range from functional, aesthetic and social improvements. Orthodontic treatment nowadays is no longer seen as a whim but as a necessity. Although all the gains already mentioned, not everything is easy, root resorptions, demineralizations and gingival retractions haunt us, orthodontists. Regarding retractions, doubts persist on the real role of orthodontic treatment in their appearance. With the proposal to

clarify this common clinical question, US researchers led by renowned researcher Peter Buschang developed a retrospective study¹ which evaluated the documentation of 327 patients (Fig 1). The results of this study revealed that within the limitations of the study orthodontic treatment does not appear to be a risk factor for the development of gingival retractions. According to the authors, only minimal amounts of gingival retraction occurred immediately after orthodontic treatment. In addition, they concluded that there was a weak association between the quantity of maxillary expansion and posttreatment gingival retraction.

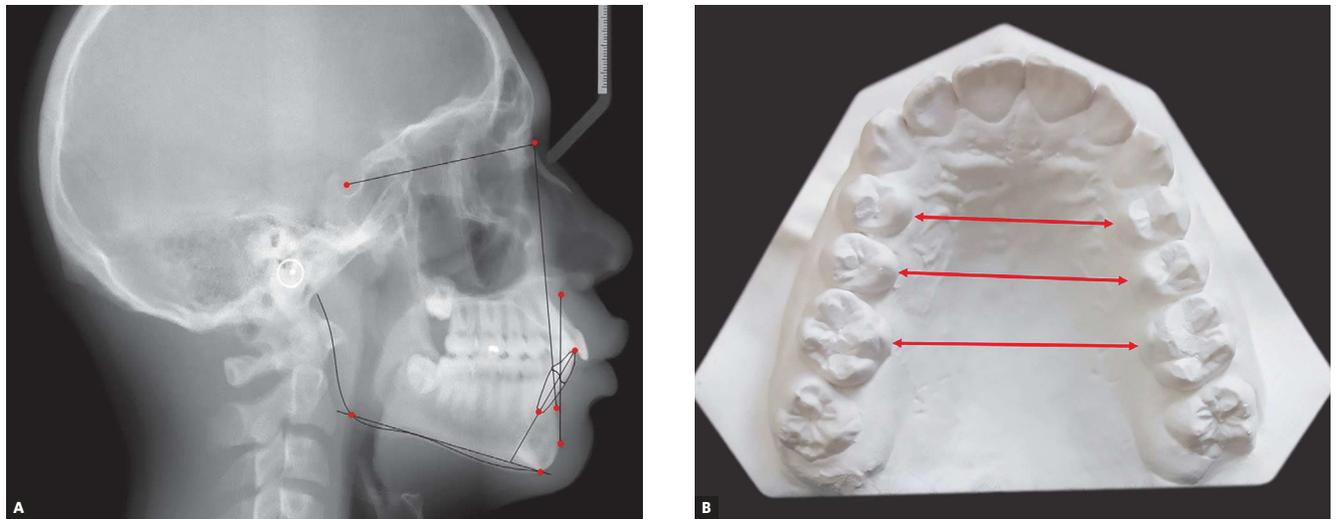


Figure 1 - A) Cephalogram with landmarks used to calculate the IMPA, mandibular central incisor to nasion-B-point, and mandibular plane angle. B) Occlusal photograph of a model used to measure intermolar and interpremolar distances at the most lingual point at the lingual gingival margins.. Source: Morris et al.¹, 2017.

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PRESENCE OF THIRD MOLARS DOES NOT GENERATE MANDIBULAR INCISOR CROWDING AFTER ORTHODONTIC TREATMENT

Despite the incredible scientific breakthrough of dentistry in recent years there are still dogmas in our profession that are reviewed and refuted every day. Third molars have been accused of several dental problems, among them the relapse of dental crowding after finalization of the orthodontic treatment. But are third molars really such a bad thing? In the search for a clinical response to this persistent questioning, Brazilian researchers have developed a systematic review followed by meta-analysis which evaluated whether there was scientific evidence to support causality between the presence of third molars and relapse of mandibular crowding after orthodontic treatment.² Therefore, a systematic search of the literature was carried out in several databases without limitation of year and language. After the meta-analysis, the authors concluded that the presence of third molars did not affect the index of irregularity and intercanine distance. In this way, the presence of third molars does not influence the relapse of dental crowding after orthodontic treatment.

ORTHODONTIC TREATMENT DOES NOT CHANGE THE DENTAL AGE ESTIMATION

In their clinical practice, health professionals are often asked to determine their patient's bone or chronological age, either to allow for better treatment planning or in forensic practice, helping to determine the age of offenders or citizens without identification documents. Estimating the dental age becomes a challenge once the root formation is completed. In adults, an indicator of dental age is the formation of secondary dentin, also associated with orthodontic treatment, as well as root resorption. It is known that orthodontic forces generate irreversible changes in dental structure, such as root resorption and the formation of secondary dentin. Thus, hypothetically, orthodontic treatment would alter the individual's dental age. Based on this assumption, Australian

researchers have developed a study in order to test this hypothesis.³ The results achieved by this study revealed that the changes caused by orthodontic treatment have no significant effect on the estimation of age in panoramic radiographs.

SUPPLEMENTATION WITH OLIVE OIL DURING THE ORTHODONTIC PERIOD REDUCES ORTHODONTIC RELAPSE

Orthodontic relapse is still a subject that plagues all of us, orthodontists. There is no more unpleasant situation than witnessing the relapse of a recently treated malocclusion, which gives us a feeling of impotence. But how could we avoid such events? The scientific literature directs us to adapt devices to contain the malocclusion, however, frequently, the collaboration of the patient concerning their use is necessary. In the search for a mechanism that could decrease or even avoid relapse after orthodontic treatment, researchers from all over the world do not calm down. Recently, it was published a study that evaluated⁴ clinically and histologically the effects of olive oil consumption in orthodontic relapse after the retention period in animals. To this purpose, a diet containing olive oil was administered to rabbits. Two experimental groups, receiving 7.7 or 15.4 ml/kg body weight of oil, were evaluated. The results of this study were encouraging since supplementation with olive oil during a period of orthodontic restraint, especially at 15.4 ml/kg body weight per day of concentration, clinically reduced orthodontic relapse. The authors note that, histologically, there was an increase in the count of osteoblasts and osteocytes.

NASAL PROPORTIONS DIFFER IN CLASS I AND CLASS II MALOCCLUSION

The concept of malocclusion is broad. With the progress of the diagnostic elements, especially with regard to imaging, the term malocclusion has expanded, representing not only individual dental malposition but a series of events with facial involvement.

As a result of this, more attention has now been paid to the face of the patient and not just to the teeth. Maxillary and or mandibular positioning may be in close relation with dental positioning. In the light of this knowledge, a question arises: would the other facial structures have relation with the existing malocclusion? In this perspective, Indian researchers developed a study where they evaluated nasal proportions among individuals with Class I and Class II malocclusion through cephalometric radiographs (Fig 2).⁵ This study also aimed to assess whether the nasal proportions were related to the gender of the individuals. The authors concluded from this study that sexual dimorphism was found in several nasal parameters. Statistical differences were found in the nasal proportions of individuals with Class I and Class II malocclusion (male and female).

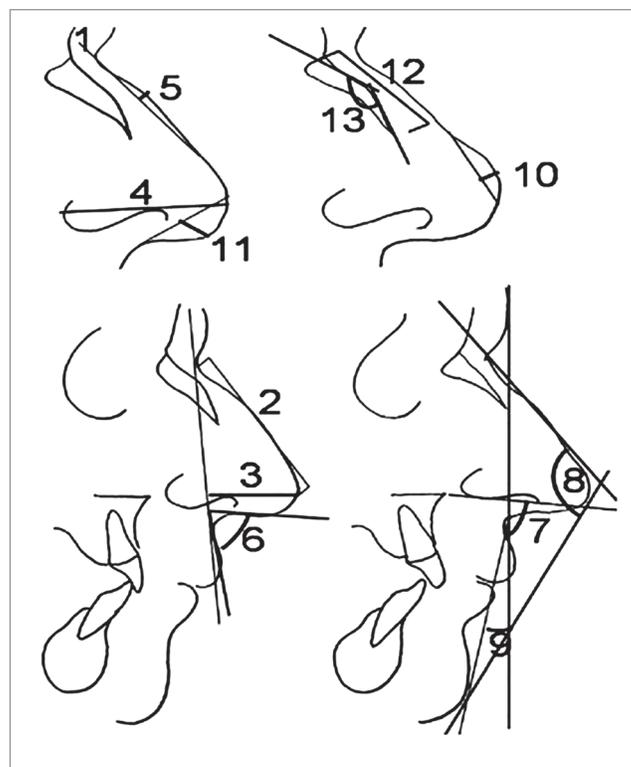


Figure 2 - Linear and angular measurements. Source: Umale et al.⁵, 2017.

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