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MALOCCLUSION INTERFERES IN ROMANTIC RELATIONSHIPS BETWEEN YOUNG ADULTS

We orthodontists, more than anyone, know the importance of a good occlusion, not only for the aesthetic aspect, but also for the functional one. Recent studies have shown unprecedented and revealing results demonstrating how much malocclusion influences social relations between individuals. From this perspective, question arises: Regarding romantic relationships, would malocclusions be decisive in establishing these relationships among young people? Seeking an answer to this question as well as other ones, Brazilian researchers developed this study.[1] Therefore, images of young people's smiles with different types of malocclusion were used (Fig 1). They were presented to evaluators associated with a visual analogue scale. The images were manipulated so that the same face would receive different types of malocclusion. The results of this study revealed that malocclusion has a negative influence in developing affective/love relationships between young adults. According to the authors, patients with a good occlusion are better perceived, based on an emotional point of view.

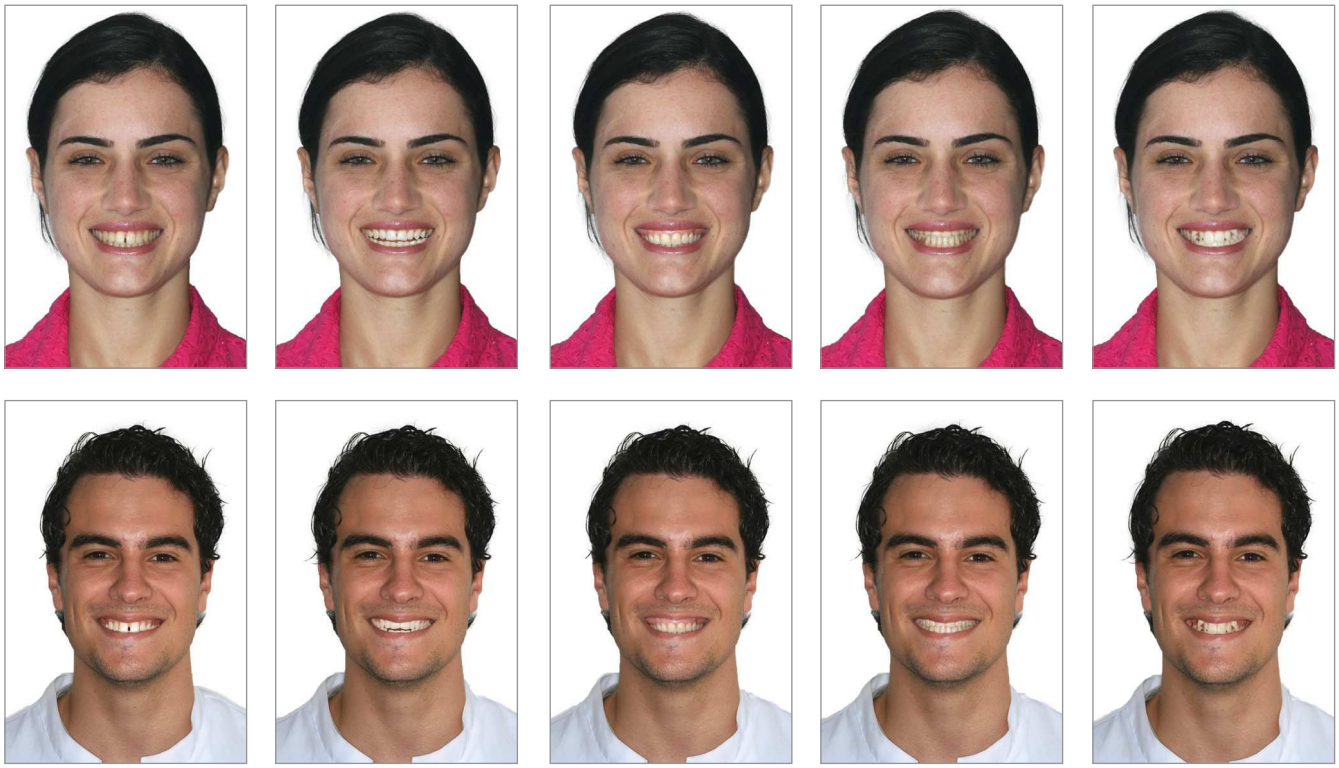

Figure 1 - Images of patients with the different malocclusions assessed (Source: Pithon et al,[1] 2015).

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3D PRINTERS ARE FAITHFUL FOR THE PRINTING OF ORTHODONTIC MODELS

We live in a transitional period in Orthodontics when it comes to orthodontic models. Plaster models are increasingly being replaced by digital models. This change is due to a number of benefits of the latter, such as: saving time and money, storage facility, practical use, among other advantages. It is worth remembering that, with virtual models, one can manipulate the occlusion, carry out set-up, among others possibilities. However, as previously pointed out, we live in a transitional stage; thus, some professionals still like to have the physical model for the development of their treatment plan. In this context, a question arises: Can one rely on digital models printed by 3D printers? In the search for answers to this question, Korean researchers developed a study[2] evaluating the accuracy of two different types of 3D printer when printing virtual teeth (Fig 2). In their study, these authors concluded that the orthodontic models printed in 3D printers are accurate enough to be used for orthodontic purposes.

AGENESIS OF THIRD MOLARS IS ASSOCIATED WITH ALTERATIONS IN THE GROWTH OF FACIAL STRUCTURES

Etiological factors for the development of malocclusions are diverse and often impossible to be controlled. When genetic factors are associated, control becomes even more difficult. Class III malocclusion is a classic example. Nevertheless, genes may perform more than one function and can, for example, be associated with delayed tooth formation, retention of deciduous teeth, dental agenesis and poor development of the alveolar bone. Despite these ascertainments, there is still no consensus about the potential association between dental agenesis and alteration of craniofacial structures. In this context, a question arises: What are the craniofacial repercussions in cases of third molar agenesis? In pursuit of this response, Spanish researchers developed a study[3] which evaluated whether there were differences in craniofacial structures among individuals with or without of third molar agenesis. The results of this study showed that third molar agenesis is associated with a reduction in Jarabak's gonial angle and the superior gonial angle, characteristic of patients with horizontal tendency towards facial growth (brachyfacial).

THE TYPE OF MALOCCLUSION IS UNRELATED TO THE PRESENCE OF BOLTON DISCREPANCY

In essence, the objective of orthodontic treatment is to restore facial as well as dental aesthetics and functioning. In order to achieve this, it is necessary to obtain, at the end of an orthodontic case, good dental intercuspation (maxillary tooth with two mandibular teeth) with overbite and overjet within normal limits. To achieve such results, it is essential that there be no tooth size discrepancy between the upper and lower arches (Bolton discrepancy).

Figure 2 - **A**) Original tooth. Replicas: **B**) tooth printed by the fused deposition modeling method (FDM) and **C**) tooth printed by the PolyJet method. (Source: Lee et al,[2] 2015).

This is because, with such intercuspation, we will not be able to achieve good and consistent aesthetics and functioning, as a consequence. In the literature, a dichotomy of thoughts is described about the interrelation between some types of malocclusion in the presence of Bolton discrepancy. In this context, a question arises: Is there a relationship between the presence of Bolton discrepancy and the different malocclusions in the Brazilian population? In the search for answers to this question, Brazilian researchers developed this study.[4] According to the study's results, the authors were able to conclude that there is no relationship between the presence of Bolton discrepancy and the different malocclusions. These results reinforce the need to carry out an individualized diagnosis.

2% GLUTARALDEHYDE AND 0.25% PERACETIC ACID ARE EFFECTIVE ORTHODONTIC PLIERS' DISINFECTANTS

Stopping infections in the dental office is a challenge for all of us orthodontists. Among the dental specialties, Orthodontics stands out for being very propitious for cross infection. Orthodontics is characterized by high turnover of patients, as well as multiplicity of disease-carrying vehicles (equipment, instruments, operator's hands, etc.) From this perspective, a question emerges: What would be the means to disinfect our instruments, especially orthodontic pliers? In response to this question, Brazilian researchers developed an *in vitro* study[5] which evaluated the effectiveness of 70° alcohol, 2% glutaraldehyde and 0.25% peracetic acid to disinfect orthodontic pliers. The pliers were previously infected with *S. mutans*, *S aureus* and *C. albicans*. The authors came to the conclusion that 2% glutaraldehyde and 0.25% peracetic acid are effective methods for the disinfection of orthodontic pliers. The authors pointed out that 70° alcohol only was not effective in eliminating *S. aureus*. Although revealing, these results are preliminary, since a multitude of other microorganisms must be evaluated.

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