



Teeth aligners vs. Braces

Mourat Chasim¹

¹ Dentist, Herndon, VA, USA

Article Info

Received: 2 May 2024

Revised: 5 May 2024

Accepted: 5 May 2024

Published: 5 May 2024

Corresponding author:

Mourat Chasim.

Dentist, Herndon, VA, USA

dt.chasim@gmail.com

Palavras-chave:

Alinhadores dentários, aparelho ortodôntico, alinhadores transparentes.

RESUMO

O tratamento ortodôntico aborda o desalinhamento dentário e a má oclusão, promovendo a saúde bucal e resultados estéticos. Os aparelhos metálicos tradicionais e os alinhadores transparentes são as duas principais modalidades para atingir esses objetivos. Esta revisão explora seus mecanismos, eficácia e vantagens, ao mesmo tempo que identifica as principais diferenças e limitações. Os aparelhos consistem em braquetes metálicos fixados nos dentes, conectados por fios e elásticos. Este sistema permite a movimentação dentária precisa, tornando-o adequado para uma ampla variedade de casos, incluindo desalinhamentos graves e más oclusões complexas. No entanto, os aparelhos são visivelmente visíveis, podem causar desconforto e requerem uma higiene oral cuidadosa. Os alinhadores transparentes são moldes removíveis feitos sob medida, projetadas para deslocar os dentes gradualmente. São quase invisíveis, proporcionando uma vantagem estética, e podem ser removidos para alimentação e higiene bucal. Os alinhadores são geralmente adequados para desalinhamentos leves a moderados, mas dependem muito da adesão do paciente e podem não ser eficazes em casos complexos.

Alinhadores de Dentes vs. Aparelho

ABSTRACT

Orthodontic treatment addresses dental misalignment and malocclusion, promoting oral health and aesthetic outcomes. Traditional metal braces and clear aligners are the two primary modalities for achieving these goals. This review explores their mechanisms, effectiveness, and advantages while identifying key differences and limitations. Braces consist of metal brackets affixed to teeth, connected by wires and elastic bands. This system allows for precise tooth movement, making it suitable for a wide range of cases, including severe misalignment and complex malocclusions. However, braces are visibly noticeable, can cause discomfort, and require careful oral hygiene. Clear aligners are custom-made, removable trays designed to shift teeth gradually. They are nearly invisible, providing an aesthetic advantage, and can be removed for eating and oral hygiene. Aligners are generally suitable for mild to moderate misalignment but depend heavily on patient compliance and may not be effective for complex cases.

Keywords:

Teeth aligners, braces, clear aligners.

This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>)



Dear Editor,

Orthodontic treatment is crucial for addressing dental misalignment and malocclusion, contributing to oral health and aesthetics. Traditionally, metal braces have been the standard for orthodontic correction, but clear aligners have become an increasingly popular alternative. This article explores the differences between these two methods, considering their benefits and limitations. Braces are composed of metal brackets bonded to the teeth, connected by wires and elastic bands.

Orthodontists tighten the wires periodically to apply controlled pressure, gradually shifting teeth into place. This approach allows for a high degree of precision and is effective for a wide range of cases, including severe misalignments and complex malocclusions. However, braces are visually conspicuous, can cause discomfort, and require careful attention to oral hygiene (1-4).

Clear aligners, on the other hand, are custom-made, removable trays that fit over the teeth. Treatment involves a series of aligners, each designed to nudge the teeth toward the desired

position. This method is typically suitable for mild to moderate misalignment and has the advantage of being nearly invisible. Additionally, aligners can be removed for eating and cleaning, making oral hygiene easier. Yet, their effectiveness relies heavily on patient compliance, and they may not be as effective for complex cases. Choosing between braces and aligners depends on several factors, including the severity of the misalignment, aesthetic preferences, and patient compliance. Braces are generally better for more complex cases, while aligners offer a discreet option that requires consistent wear. Aligners can be removed for eating and brushing, but they can be lost or damaged more easily, potentially leading to additional costs (3-6).

In conclusion, both braces and clear aligners have unique benefits and limitations, making them suitable for different orthodontic needs. The decision should be based on clinical evaluation and individual patient circumstances. Understanding the advantages and challenges of each method can help healthcare professionals and patients choose the best treatment plan.

REFERÊNCIAS / REFERENCES

1. Rossini G, Parrini S, Castroflorio T, Deregibus A, Debernardi CL. Efficacy of clear aligners in controlling orthodontic tooth movement: a systematic review. *Angle Orthod.* 2015;85(5):881-889. doi:10.2319/061614-436.1
2. Weir T. Clear aligners in orthodontic treatment. *Aust Dent J.* 2017;62 Suppl 1:58-62. doi:10.1111/adj.12480
3. Castroflorio T, Sedran A, Parrini S, et al. Predictability of orthodontic tooth movement with aligners: effect of treatment design [published correction appears in *Prog Orthod.* 2023 Oct 24;24(1):47]. *Prog Orthod.* 2023;24(1):2. doi:10.1186/s40510-022-00453-0
4. Ke Y, Zhu Y, Zhu M. A comparison of treatment effectiveness between clear aligner and fixed appliance therapies. *BMC Oral Health.* 2019;19(1):24. doi:10.1186/s12903-018-0695-z
5. Al-Tayar B, Al-Somairi MAA, ALshoaibi LH, et al. Impact of molar teeth distalization by clear aligners on temporomandibular joint: a three-dimensional study. *Prog Orthod.* 2023;24(1):25. doi:10.1186/s40510-023-00474-3
6. Fang X, Qi R, Liu C. Root resorption in orthodontic treatment with clear aligners: A systematic review and meta-analysis. *Orthod Craniofac Res.* 2019;22(4):259-269. doi:10.1111/ocr.12337