

Editorial

Clear Aligners vs Fixed Orthodontic Treatment - Where are we now?

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In recent years there has been a tremendous increase in demand for an alternative to braces or for fixed orthodontic treatment. Technological advancements like CAD-CAM, intraoral scanners, 3D prototyping have revolutionized the way dental practitioners diagnose and treat cases worldwide [1]. Clear aligners have been available for use since their advent in 1998 [2]. Since then they have progressed and advanced on many fronts. In the beginning, it was stated that there would be no future for aligners as complex tooth movements would not be possible. With the introduction of 3D scanning complex tooth movements are possible now.

Fixed orthodontic treatment first was started by Edward H Angle around 1928 [3]. His Edgewise Appliance was the pillar on which all the fixed appliances are based on today. Many authors have modified the technique so as to simplify the treatment for the orthodontist as well as the patient. Fixed orthodontic treatment has evolved tremendously throughout the years. Trial and error process has been done with fixed appliances since its inception in 1928. Fixed appliances will be at its 100th year in 2018. All authors who had practiced this technique had faced many drawbacks. It is only through the years that they reformed and made adjustments to the appliance to perfect it [4]. This was a time taking process and finally, now it had been perfected. The same can also be said of clear aligners. Comparing them to fixed orthodontic treatment is wrong in the present scenario. Aligners have been in the market for only 20 years as compared to 100 years of fixed appliances. The changes seen with aligner technology have been promising. Many companies now are doing research, conducting clinical trials, getting grants for the rise in the use of aligners [5].

In my daily clinical practice, I come across many patients asking for an alternative for braces. They are the so-called "Google" users and have self-diagnosed their case. To explain to them that all cases cannot be done by aligners is a task which I am still getting used to. Aligners give great results but they still have their drawbacks. Many advertising agencies are openly saying that braces are no longer required as aligners are here and braces are a thing of the past [6].

These marketing companies usually just try to promote the brand as a whole. There are so many factors which a patient has to think about before going for aligners. Cost being the main one. The cost of the aligners is mostly 5-6 times the cost of braces (depends on which country you are from). Also, there are some cases which the aligners

cannot be used (eg tongue thrusting, skeletal discrepancies, impacted teeth etc) [7].

Fixed orthodontic treatment has been refined for over 90 years; let aligners have the same time for refinement. One more interesting thing is that any orthodontist who has started an Aligner cases will feel that he could have gotten better results with braces. The main fact is that this would have been his first aligner case while he has already done over 200 braces cases. He should compare this result with his first braces case as he has had time to improve upon his fixed orthodontic skills. He learned from his mistakes and perfected the technique. The same principle applies with aligner therapy. Patients need to be educated on patient compliance with aligners. Patient compliance is the main requirement for the treatment to be successful. The aligners need to be worn for the designated hours every day for ideal treatment [8]. Fixed orthodontic treatment is not a thing of the past. It is very much here to stay. Most of the orthodontists agree to the fact that their main orthodontic practice consists mainly of braces and some amount to aligners. Aligners have made orthodontic treatment much more aesthetical and pain-free for all the patients [9].

It is definitely a boon for the dentists are patients all over the world. Careful monitoring is required during aligner therapy to avoid delay in treatments. In all both braces and aligners are an important part of orthodontic treatment, braces may have more value as of now but soon both will have equal value.

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