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Can Aligners Help us Solve the Covid-19 Paradox: Time to Utilize the Benefits of Aligners for carrying out Orthodontic Treatment

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Abstract

The novel Corona virus has caused extensive damage to both life and economy and it has also given us a chance to adapt and make changes to the way we do things1. This includes changes that must be made to the way we practice dentistry as a whole. Orthodontics, a specialty of dentistry that involves long term treatments usually in order to fulfill esthetic objectives planned out for the patients is at a greater risk compared to other specialties because most of them do not require long-term follow-ups. During this crisis it is essential to implement measures that help patient treatments to continue as planned and at the same time it is imperative to employ methods that reduce complications. Aligners are very useful in carrying out most tooth movements with the help of attachments and these should definitely be considered as an aid to Orthodontic practice.

Keywords: Aligners, Corona Virus, COVID-19

1. Introduction

In the words of Charles Darwin, "In the struggle for survival, the fittest win out at the expense of their rivals because they succeed in adapting themselves best to their environment". The novel Corona virus has caused extensive damage to both life and economy and it has also given us a chance to adapt and make changes to the way we do things[1]. This includes changes that must be made to the way we practice dentistry as a whole. Orthodontics, a specialty of dentistry that involves long term treatments usually in order to fulfill esthetic objectives planned out for the patients is at a greater risk compared to other specialties because most of them do not require long-term follow-ups.

With fixed Orthodontic treatment, one of the concerns being felt by patients and their treating dentists alike, is the inability to follow-up on the treatment or even initiate new treatments. This is the reason why aligners being used as substitutes for simple cases and as a part of two-phase therapy for complex cases might be worth considering. Aligners allow the treating orthodontists to reduce the number of physical visits by a patient to the clinics thereby decreasing chances of cross-infection and at the same time the patients feel more assured knowing that their treatment is continuing as planned[2].

During this crisis it is essential to implement measures that help patient treatments to continue as planned and at the same time it is imperative to employ methods that reduce complications. Aligners are very useful in carrying out most tooth movements with the help of attachments and these should definitely be considered as an aid to Orthodontic practice[2]. With aligners the key to getting a successful result lies in planning the staging process carefully using their associated softwares. While using these softwares individual tooth movements must be planned carefully so that the treatment progresses following the established biologic and bio-mechanical criteria[3,4].

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Orthodontists can enhance the quality of their results by using aligners for mild to moderate problems and gradually using them for more complex solutions. As is the case with fixed appliance therapy, aligners need carefully review and refinements just as these are needed in any case receiving Orthodontic treatment. Aligners may be used for interceptive or even adjunctive treatment in the near future to aid in dental treatments without putting the dentist or the patient at risk[4]. At the same time, it is also important to understand the functioning of aligners along with potential risks and complications so as to minimize problems[5].

As is the case with fixed Orthodontic appliances, clear aligners employ a variety of modifications in design and attachments to bring about a certain type of tooth movement. While they all employ the traditional clear design but the variations in thickness of the material, shape and size of attachments and flexibility all result in varied movements[5]. From a time when they were only meant to be used for minor problems the role of clear aligners has only increased with time and has expanded to treating complex malocclusions.

Both aligners and fixed braces have been found to be effective in treating malocclusions with aligners working well in decreasing the treatment time and carrying out controlled tooth movements while braces worked better in terms of control over occlusion and long term stability[6]. Under the current circumstances aligners would be of tremendous value in allowing the treatment to continue without putting the dentist, their assistants or the patients at risk of infection which is how they can help solve the paradox we are currently living in.

2. References

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