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Thesis : Down's Syndrome

Abstract

Basic problems of the need and demand for orthodontic treatment have been discussed and new areas of research have been identified. Discrepancies have been described between the views of the dental profession and the potential patients on malocclusion and the need for treatment. For malocclusions with or without impairment of the function the self perception of the patient may be different from and of more relevance than the professional judgment of the orthodontist. Before going into orthodontic treatment, the social sufficiency of the patient should be evaluated.

Summary

Orthodontics is usually among the most elective areas of oral therapy. However, when considering the significant effect on personality development that a beautiful smile with normally aligned teeth can have, and the increased self-esteem that this health service develops, it becomes less elective. Orthodontic therapy, usually delivered by orthodontic specialists, is readily available at moderate cost and without many risks or complications. It should be accomplished when necessary to improve the appearance of the smile and the function of the chewing mechanism, as well as to improve patient self-acceptance.

Braces come in lots of different forms, from fixed-metal braces to removable clear aligners. Here's all the overview of different types of orthodontic treatment that i usually suggest to the patient's.

Invisible Braces

Invisalign

This uses a series of virtually-invisible removable custom-made aligners to gradually straighten your teeth. Each aligner is worn for about two weeks for 20 to 22 hours a day before the next is fitted.

Lingual braces

Lingual braces fit discreetly behind your teeth, against their inner surfaces in order to realign them.

Ceramic braces

Also known as ceramic braces, these use transparent or tooth-coloured brackets to create a subtler appearance than traditional metal braces.

Traditiobnal Braces

Fixed metal braces

remain a popular option for straightening teeth, particularly among teenagers, as they produce effective and reliable results. However, lots of adults also have fixed braces too.

Self-ligating braces

These appear very similar to traditional metal braces, but the wire is fitted using a spring clip rather than elastic bands which reduces the friction between the bracket and the wire.

3D printing in dentistry with emphasis on prosthetic rehabilitation and regenerative approaches

Orthodontics - is one of the fields in Dentistry that has also benefited from advances in 3D printing, enabling the transition to a fully digital workflow with the incorporation of intraoral scanners and 3D printers.
3D printing can enable the presentation and visualization of these changes and, therefore, aid orthodontists foresee the biological responses following the application of orthodontic forces and patients visualize the final outcomes of orthodontics treatment.
Moreover, 3D printing has been used to fabricate orthodontic models, aligners, and appliances had better fitting accuracy and resulted in more rapid tooth movement with more uniform stress distribution. 3D printing, several factors should be taken into consideration to allow a better control of tooth movement, such as a lower layer thickness (staircase effect) and a higher accuracy

Refferences

Hadjichristou Christina, ... Koidis Petros, in 3D Printing: Applications in Medicine and Surgery Volume 2, 2022

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