Smile does matter -contemporary orthodontic treatment-

Assoc.Prof.d-r Stipica Popovski Faculty of Medical Science-Stip, MACEDONIA

The desire for straight teeth is a not a trapping of modern society.



The quest for the beautiful smile dates from the ancient ages !!!

According to the AAO (American Association of Orthodontists), archaeologists have discovered mummified ancients with crude metal bands wrapped around individual teeth.



Extreme Makeovers may be new, but "braces" date as far back as ancient man!







400-500 BC, Hippocrates and Aristotle both ruminated about ways to straighten teeth and fix various dental conditions.



Your smile. It's a part of your personality. It's how you present yourself to others. It defines you.

That's why it's so important to take good care of the most important elements of your smile-your teeth, gums, and mouth.



Because if you're not confident with your dental health and appearance, it can affect the way you feel about yourself and how others perceive you.



Attractiveness impacts not only on mating success, but also on kinship opportunities, evaluations of personality and performance, as well as employment prospects.



As technology enhances our daily lives, it also continues to advance the science of orthodontics.



More and more companies are utilizing digital computer imaging to make orthodontic treatment more precise.

Change Smile

Smile Design service





In much the same way an artist uses brushes and paint to create his or her art, we too must approach what we do, using the face and its features along with our instruments to do the same.



However, to approach esthetic dentistry successfully, one must understand the distinction between "craft" and "art".



CRAFT is the mechanics

- (the step-by-step protocols and procedural methodology
- that we have learned throught years of experiance)
- of what we do, and
- **ART** is the quality of what we do.



When the discerning and learned eye is combined with the foundation of mechanics, the functionally beautiful smile is created.



Orthodontics can be a lengthy process. Some patients prefer to have crowns or veneers fitted to their teeth instead in order to mask the irregularity.



Whether this is feasible in any particular case needs good professional advice !!!



Veneers are added to the front surface of the teeth to mask the irregularity

The teeth can be reduced in size and crowns or "caps" can be fitted to give a larger change in appearance. These approaches also allow defects in the tooth surface to be hidden.

These restorative approaches offer the attraction of rapid results and may be the treatment of choice in some cases.

Drawbacks that you need to be aware of are:

I the preparation of the teeth is, to a greater or lesser extent, a destructive and irreversible process

I the crowns or veneers cannot be expected to last indefinitely and the need for replacements over the years should be borne in mind

I there are definite limits to the amount of irregularity which can be tackled successfully in this way.

Veneers can be become excessively thick, crowns can only be reshaped by a limited extent.

I there may be adverse effects on the underlying gum tissues over the years from having the edges of the crowns or veneers close by

Risks of orthodontic treatment

- In the vast majority of well-planned cases, the benefits of orthodontic treatment outweigh the possible disadvantages.
- Patient education and the selection of appropriate treatment plans for individuals reduce this risk considerably.
- The most important aspect of orthodontic care is to have an extremely high standard of oral hygiene
- before and during orthodontic treatment.

Early tooth decay: poor oral hygiene (tooth brushing) can lead to damage of the teeth around orthodontic braces. Early tooth decay (decalcification) will occur when plaque accumulates around a fixed brace in the presence of frequent sugar intake. Thorough dietary advice, excellent oral hygiene and the use of fluoride supplements are used routinely by orthodontists to minimise this risk.

Root Resorption: mild loss of tooth root tissue (dissolving) is very commonly seen as a consequence of tooth movement but this does not cause any long-term problems for the vast majority of patients.

Loss of Periodontal Support: if a patient's oral hygiene is poor during treatment, orthodontics may exacerbate gingival inflammation and susceptibility to periodontal (gum) disease.

Patients who have undergone orthodontic treatment do not have any increased predisposition to developing periodontal disease22

So, the question is quick makeover or slow and natural expresion?

Evidence suggests that correcting the following tooth/ jaw anomalies with orthodontic appliances will benefit the patient's long-term dental health:-

Crowding: Teeth may be poorly aligned because the teeth are too large for the mouth. Poor biting relationships and unsightly appearance may all result from crowding of the teeth. The upper canine teeth are one of the most frequent culprits.













Spacing: If teeth have either not developed or are missing, or smaller than average in size, unsightly spaces may occur between the teeth.

- This is a less common problem though when compared with patients who have significant crowding of their teeth.
- Some malocclusions have a greater adverse effect on quality of life than other types.
- Individuals with four or more missing teeth have been shown to have poorer "quality of life" score

Crossbite: This occurs when the upper front teeth bite inside the lower teeth i.e. towards the tongue. This can lead to one or more of the lower incisor teeth becoming mobile with early receding of the gums. It can also occur on the back teeth and is best corrected at an early age e.g. 8-10 years, due to biting and chewing difficulties as a result of the deviated bite and associated displacement of the lower jaw.











Open Bite: An open bite results when the upper and lower front teeth do not touch when biting together. This leads to all the chewing pressures being placed on the back teeth, which may cause these teeth to wear down quicker. It may also make the patient's biting less efficient, which may cause social problems especially at meal times

Deep (traumatic) overbite: Extreme (vertical) overlap of the top and bottom front teeth can lead to them contacting the roof of the mouth causing significant tissue damage and gum stripping. In some patients, this can contribute to excessive tooth wear and early tooth loss in adulthood.

"Reverse" overjet or lower jaw protrusion: Approximately 3 - 5% of the population have a lower jaw that is significantly longer than their upper jaw. This causes them to bite their lower front teeth ahead of the upper front teeth thus creating a total crossbite of the teeth. It can also lead to significant wearing down of the tips of the upper front teeth.

Increased overjet: Upper front teeth that protrude beyond normal contact with the lower teeth often indicate a poor bite of back teeth and can indicate unevenness in jaw growth. Thumb and finger sucking habits can also cause prominence of the upper incisor teeth and increase the risk of trauma and permanent damage to the front teeth. A systematic review of the available evidence on this topic found that individuals with an increased overjet had more than double the risk of injury6

Comprehensive orthodontic treatment can be a tremendous benefit to almost any patient, no matter what the age.

Adults can benefit just as much as children, and the treatment does not take any longer.

Treatment may last from as little as four months, but can last up to two or three years depending on the complexity of the case.

Straight teeth and a nice smile that improves self-esteem and confidence. Improved facial shape and profile. Better chewing function and speech. To prevent excessive wear on certain teeth not contacting properly with the opposing arch.

Freedom from jaw/joint pain. Improved ability to clean one's teeth and avoid tooth decay and periodontal disease. Establish a healthy foundation for the replacement of missing teeth or other restorative dental work. The reduction in mouth-breathing and lip incompetence

Comprehensive orthodontic care combines art, science and dental technology to create beautiful, healthy smiles that can last a lifetime!