

Understanding the Long-Term Effects and Benefits of Malocclusion Treatment

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DESCRIPTION

Malocclusion is a term used to describe any type of misalignment or irregularity in the teeth, jaws, or bite. Malocclusion is a common dental problem that affects people of all ages, and it can lead to a variety of issues, including difficulty chewing and speaking, gum disease, and even temporomandibular joint disorders (TMJ) [1,2].

Causes of malocclusion

There are many factors that can cause malocclusion, including genetics, childhood habits, injuries, and developmental problems. In some cases, malocclusion may be caused by a combination of these factors [3].

Genetics: One of the most common causes of malocclusion is genetics. If a child's parents or other family members have misaligned teeth or other dental issues, there is a higher likelihood that the child will also develop malocclusion.

Childhood habits: Certain habits that children develop during childhood can also contribute to malocclusion. These habits include thumb-sucking, pacifier use, tongue-thrusting, and prolonged bottle feeding [4,5].

Injuries: Injuries to the face or jaw can also cause malocclusion. If the jaw is broken or the teeth are knocked out of alignment, it can result in malocclusion [6].

Developmental problems: Finally, some developmental problems can also lead to malocclusion. For example, if a child's jaw is too small or too large for their teeth, malocclusion may develop [7].

Symptoms of malocclusion

The symptoms of malocclusion can vary depending on the severity of the misalignment and the type of malocclusion that is present [8,9]. Some of the most common symptoms of malocclusion include:

Speech problems: Malocclusion can also cause speech problems, particularly if the misalignment affects the position of the tongue.

Headaches: Some people with malocclusion experience frequent headaches, particularly if the misalignment is severe.

Gum disease: People with malocclusion are at an increased risk of gum disease and tooth decay. This is because misaligned teeth can be more difficult to clean, allowing bacteria to build up and cause infection [10].

Temporomandibular Joint disorders (TMJ): Finally, malocclusion can also contribute to temporomandibular joint disorders (TMJ). TMJ is a condition that affects the joints that connect the jawbone to the skull, and it can cause pain, discomfort, and difficulty opening and closing the mouth.

Treatment options for malocclusion: Fortunately, there are many treatment options available for malocclusion, ranging from orthodontic appliances to surgery. The best treatment option for each individual will depend on the type and severity of their malocclusion, as well as their personal preferences and budget [11].

Orthodontic appliances: Orthodontic appliances are one of the most common treatments for malocclusion. These appliances include braces, aligners, and retainers, and they work by gradually shifting the teeth into their proper positions.

Surgery: In some cases, surgery may be necessary to correct severe malocclusion. Surgery may involve repositioning the jaws or removing teeth to create more space in the mouth.

Jaw growth modification: For children with malocclusion, jaw growth modification may be recommended. This treatment involves using appliances to help guide the growth of the jaw, allowing it to develop in a way that promotes proper alignment of the teeth.

Tooth extraction: In some cases, tooth extraction may be necessary to correct malocclusion. This may be necessary if there is not enough space in the mouth for all of the teeth, or if a tooth is causing crowding or other alignment issues [12].

Malocclusion is a common dental problem that can cause a variety of issues, including difficulty chewing and speaking, gum disease, and temporomandibular joint disorders (TMJ). There are many factors that can contribute to malocclusion, including

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genetics, childhood habits, injuries, and developmental problems [13-15].

REFERENCES

1. Fusayama T, Okuse K, Hosoda H. Relationship between hardness, discoloration, and microbial invasion in carious dentin. *J Dent Res.* 1966;45(4):1033-1046.
2. Ramakrishnaiah R, Rehman GU, Basavarajappa S, Al Khuraif AA, Durgesh BH, Khan AS, et al. Applications of Raman spectroscopy in dentistry: analysis of tooth structure. *Appl Spectros Rev.* 2015;50(4):332-350.
3. Dohke M, Osato S. Morphological study of the palatal rugae in Japanese I. Bilateral differences in the regressive evolution of the palatal rugae. *Jap J Oral Biol.* 1994;36(2):126-140.
4. Indira AP, Gupta M, David MP. Usefulness of palatal rugae patterns in establishing identity: Preliminary results from Bengaluru city, India. *J Forensic Dent Sci.* 2012;4(1):2.
5. Rath R, Reginald BA. Palatal rugae: An effective marker in population differentiation. *J Forensic Dent Sci.* 2014;6(1):46.
6. Hahn W, Fialka-Fricke J, Dathe H, Fricke-Zech S, Zapf A, Gruber R, et al. Initial forces generated by three types of thermoplastic appliances on an upper central incisor during tipping. *Eur J Orthod.* 2009;31(6):625-631.
7. Brunsvold MA. Pathologic tooth migration. *J Periodontol.* 2005; 76(6):859-866.
8. Simon M, Keilig L, Schwarze J, Jung BA, Bourauel C. Treatment outcome and efficacy of an aligner technique regarding incisor torque, premolar derotation and molar distalization. *BMC oral health.* 2014; 14(1):1-7.
9. Padminee K, Poorni S, Diana D, Duraivel D, Srinivasan MR. Effectiveness of casein phosphopeptide-amorphous calcium phosphate and xylitol chewing gums on salivary pH, buffer capacity, and *Streptococcus mutans* levels: An interventional study. *Indian J Dent Res.* 2018;29(5):616.
10. Jayarajan J, Janardhanam P, Jayakumar P. Efficacy of CPP-ACP and CPP-ACPF on enamel remineralization-An *in vitro* study using scanning electron microscope and DIAGNOdent®. *Indian J Dent Res.* 2011;22(1):77.
11. Achilleos E, Rahiotis C, Kavvadia K, Vougiouklakis G. Clinical evaluation of two different prevention programs in adults depending on their caries risk profile: One-year results. *Oper Dent.* 2019;44(2): 127-137.
12. Ezoddini-Ardakani F. Efficacy of Miswak (*salvadora persica*) in preventing dental caries. *Health.* 2010;2(5):499.
13. Güçlü ZA, Alaçam A, Coleman NJ. A 12-week assessment of the treatment of white spot lesions with CPP-ACP paste and/or fluoride varnish. *Biomed Res Int.* 2016.
14. Dianti F, Triaminingsih S, Irawan B. Effects of miswak and nano calcium carbonate toothpastes on the hardness of demineralized human tooth surfaces. *J Phys Conf Ser.* 2018;1073(3p. 032008):1-5.
15. 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.