



## Results of Treatment

Orthodontic treatment usually proceeds as planned, and we intend to do everything possible to achieve the best results for every patient. However, we cannot guarantee that you will be completely satisfied with your results, nor can all complications or consequences be anticipated. The success of treatment depends on your cooperation in keeping appointments, maintaining good oral hygiene, avoiding loose or broken appliances, and following the orthodontist's instructions carefully.

## Length of Treatment

The length of treatment depends on a number of issues, including the severity of the problem, the patient's growth and the level of patient cooperation. The actual treatment time is usually close to the estimated treatment time, but treatment may be lengthened if, for example, unanticipated growth occurs, if there are habits affecting the dentofacial structures, if periodontal or other dental problems occur, or if patient cooperation is not adequate. Therefore, changes in the original treatment plan may become necessary. If treatment time is extended beyond the original estimate, additional fees may be assessed.

## Discomfort

The mouth is very sensitive so you can expect an adjustment period and some discomfort due to the introduction of orthodontic appliances. Non-prescription pain medication can be used during this adjustment period.

## Relapse

Completed orthodontic treatment does not guarantee perfectly straight teeth for the rest of your life. Retainers will be required to keep your teeth in their new positions as a result of your orthodontic treatment. You must wear your retainers as instructed or teeth may shift, in addition to other adverse effects. Regular retainer wear is often necessary for several years following orthodontic treatment. However, changes after that time can occur due to natural causes, including habits such as tongue thrusting, mouth breathing, and growth and maturation that continue throughout life. Later in life, most people will see their teeth shift. Minor irregularities, particularly in the lower front teeth, may have to be accepted. Some changes may require additional orthodontic treatment or, in some cases, surgery. Some situations may require non-removable retainers or other dental appliances made by your family dentist.

## Extractions

Some cases will require the removal of deciduous (baby) teeth or permanent teeth. There are additional risks associated with the removal of teeth which you should discuss with your family dentist or oral surgeon prior to the procedure.

## Orthognathic Surgery

Some patients have significant skeletal disharmonies which require orthodontic treatment in conjunction with orthognathic (dentofacial) surgery. There are additional risks associated with this surgery which you should discuss with your oral and/or maxillofacial

surgeon prior to beginning orthodontic treatment.

Please be aware that orthodontic treatment prior to orthognathic surgery often only aligns the teeth within the individual dental arches. Therefore, patients discontinuing orthodontic treatment without completing the planned surgical procedures may have a malocclusion that is worse than when they began treatment!

## Decalcification and Dental Caries

Excellent oral hygiene is essential during orthodontic treatment as are regular visits to your family dentist. Inadequate or improper hygiene could result in cavities, discolored teeth, periodontal disease and/or decalcification. These same problems can occur without orthodontic treatment, but the risk is greater to an individual wearing braces or other appliances. These problems may be aggravated if the patient has not had the benefit of fluoridated water or its substitute, or if the patient consumes sweetened beverages or foods.

## Root Resorption

The roots of some patients' teeth become shorter (resorption) during orthodontic treatment. It is not known exactly what causes root resorption, nor is it possible to predict which patients will experience it. However, many patients have retained teeth throughout life with severely shortened roots. If resorption is detected during orthodontic treatment, your orthodontist may recommend a pause in treatment or the removal of the appliances prior to the completion of orthodontic treatment.

## Nerve Damage

A tooth that has been traumatized by an accident or deep decay may have experienced damage to the nerve of the tooth. Orthodontic tooth movement may, in some cases, aggravate this condition. In some cases, root canal treatment may be necessary. In severe cases, the tooth or teeth may be lost.

## Periodontal Disease

Periodontal (gum and bone) disease can develop or worsen during orthodontic treatment due to many factors, but most often due to the lack of adequate oral hygiene. You must have your general dentist, or if indicated, a periodontist monitor your periodontal health during orthodontic treatment every three to six months. If periodontal problems cannot be controlled, orthodontic treatment may have to be discontinued prior to completion.

## Injury From Orthodontic Appliances

Activities or foods which could damage, loosen or dislodge orthodontic appliances need to be avoided. Loosened or damaged orthodontic appliances can be inhaled or swallowed or could cause other damage to the patient. You should inform your orthodontist of any unusual symptoms or of any loose or broken appliances as soon as they are noticed. Damage to the enamel of a tooth or to a restoration (crown, bonding, veneer, etc.) is possible when orthodontic appliances are removed. This problem may be more likely when esthetic (clear or tooth colored) appliances have been selected. If damage to a tooth or restoration occurs, restoration of the involved tooth/teeth by your dentist may be necessary.

## Headgears

Orthodontic headgears can cause injury to the patient. Injuries can include damage to the face or eyes. In the event of injury or especially an eye injury, however minor, immediate medical help should be sought. Refrain from wearing headgear in situations where there may be a chance that it could be dislodged or pulled off. Sports activities and games should be avoided when wearing orthodontic headgear.

## Temporomandibular (Jaw) Joint Dysfunction

Problems may occur in the jaw joints, i.e., temporomandibular joints (TMJ), causing pain, headaches or ear problems. Many factors can affect the health of the jaw joints, including past trauma (blows to the head or face), arthritis, hereditary tendency to jaw joint problems, excessive tooth grinding or clenching, poorly balanced bite, and many medical conditions. Jaw joint problems may occur with or without orthodontic treatment. Any jaw joint symptoms, including pain, jaw popping or difficulty opening or closing, should be promptly reported to the orthodontist. Treatment by other medical or dental specialists may be necessary.

## Impacted, Ankylosed, Unerupted Teeth

Teeth may become impacted (trapped below the bone or gums), ankylosed (fused to the bone) or just fail to erupt. Oftentimes, these conditions occur for no apparent reason and generally cannot be anticipated. Treatment of these conditions depends on the particular circumstance and the overall importance of the involved tooth, and may require extraction, surgical exposure, surgical transplantation or prosthetic replacement.

## Occlusal Adjustment

You can expect minimal imperfections in the way your teeth meet following the end of treatment. An occlusal equilibration procedure may be necessary, which is a grinding method used to fine-tune the occlusion. It may also be necessary to remove a small amount of enamel in between the teeth, thereby "flattening" surfaces in order to reduce the possibility of a relapse.

## Non-Ideal Results

Due to the wide variation in the size and shape of the teeth, missing teeth, etc., achievement of an ideal result (for example, complete closure of a space) may not be possible. Restorative dental treatment, such as esthetic bonding, crowns or bridges or periodontal therapy, may be indicated. You are encouraged to ask your orthodontist and family dentist about adjunctive care.

## Third Molars

As third molars (wisdom teeth) develop, your teeth may change alignment. Your dentist and/or orthodontist should monitor them in order to determine when and if the third molars need to be removed.

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