

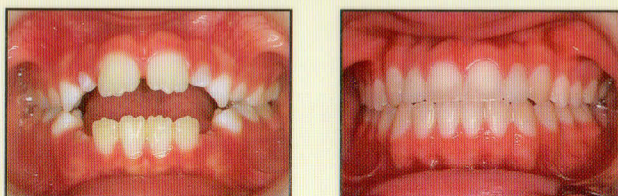
# Dentofacial Orthopedics and Interceptive Orthodontics

Before → After



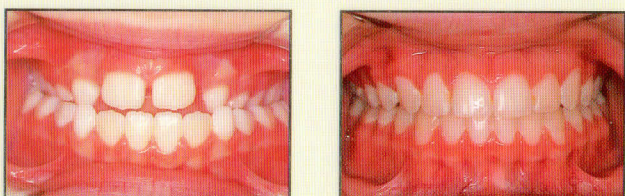
Severe crowding treated with selective extractions of primary teeth and guidance of eruption

Before → After



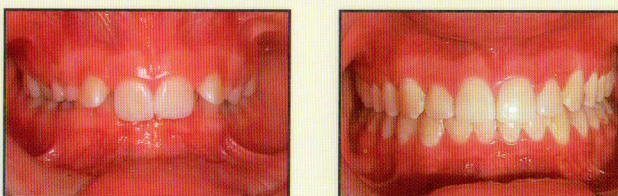
Anterior open bite managed with a habit correction appliance

Before → After



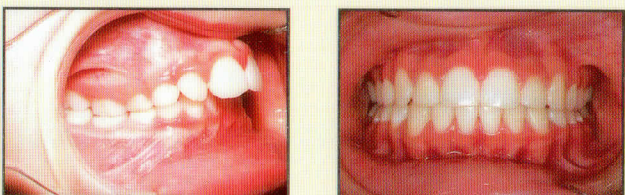
Bilateral cross bite corrected by expansion of the palate

Before → After



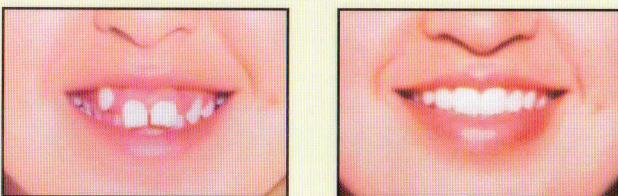
Deep bite treated by correcting the vertical dimension

Before → After



Excessive overjet corrected by balancing jaw relationships

Before → After

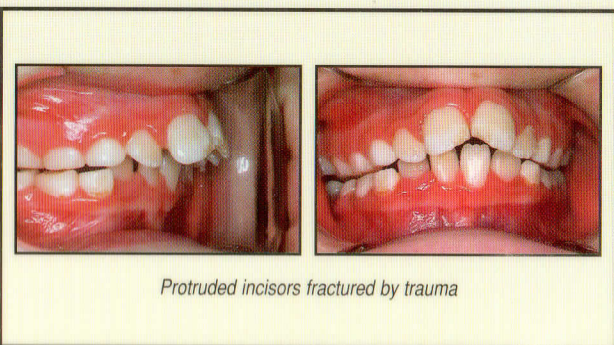


Gummy smile corrected by managing dental and alveolar excess

Each patient pictured above benefitted from timely referral and treatment *before* all permanent teeth erupted.

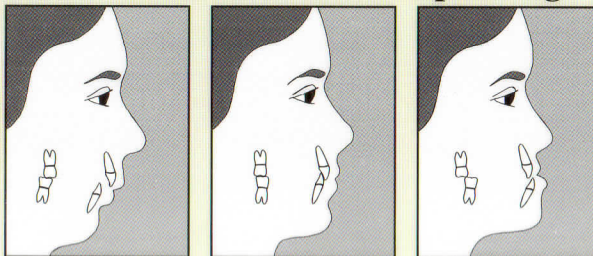
## Potential Benefits of Timely Treatment

- ✓ Influence growth of the jaws in a positive manner
- ✓ Improve the width of the dental arches
- ✓ Reduce the need to extract permanent teeth
- ✓ Reduce or eliminate the need for jaw surgery
- ✓ Lower the risk of trauma to protruded front teeth
- ✓ Correct harmful oral habits
- ✓ Reduce appearance-consciousness
- ✓ Simplify and shorten treatment time for definitive orthodontic treatment
- ✓ Increase the stability of final treatment results
- ✓ Reduce the likelihood of impacted permanent teeth
- ✓ Improve speech development
- ✓ Improve the position of first permanent molars
- ✓ Guide permanent teeth into more favorable positions
- ✓ Improve lip closure
- ✓ Preserve or gain space for erupting permanent teeth
- ✓ Reduce the potential for damage to TM joints
- ✓ Better cooperation before the teenage years



Protruded incisors fractured by trauma

## Dental and Jaw Relationships at Age 7



Class II

Class I

Class III



**Gamm Orthodontic Specialists**  
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**Q. When is the best time to refer a child with a skeletal disproportion or oral habit?**

A. Because some orthodontic problems respond best to early correction, the child should be referred *as soon as a problem is recognized*. Optimal treatment timing will be determined by an accurate differential diagnosis and the growth and development of the individual patient.

**Q. Why are some children treated before all of the permanent teeth erupt?**

A. In most cases where early orthodontic treatment is recommended, the objective of interceptive treatment will be one or more of the following:

- ▶ to correct jaw disproportions before aligning the teeth
- ▶ to prevent injury to protruded teeth
- ▶ to manage insufficient archlength (crowding)
- ▶ to eliminate damaging habits

With these problems, timely treatment may provide advantages that are not available later. After the permanent teeth erupt, the treatment objective is to achieve optimal alignment, esthetics, function, and stability.

**Q. Do all children with orthodontic problems require interceptive treatment?**

A. No. The need for interceptive orthodontics must be determined on an individual basis. After a thorough diagnosis, the orthodontist will determine if the benefits and opportunities significantly outweigh the time and effort involved in two phases of treatment. For many children, a delayed single-phase treatment is the best approach.

**Q. Why are serial or selective extractions recommended for some young patients?**

A. Early removal of selected primary teeth can be necessary to guide the eruption of permanent teeth. Carefully-timed extractions may prevent a variety of problems including:

- ▶ palatal impaction or high eruption of permanent canines with little or no attached gingiva
- ▶ root resorption, especially on permanent lateral incisors
- ▶ severe crowding in the permanent dentition requiring extensive appliance therapy

**Q. Why is age 7 an ideal time for screening by an orthodontist?**

A. With the presence of permanent incisors and the first molars the orthodontist can evaluate skeletal and occlusal relationships as well as present and future crowding. Also, habit patterns, facial asymmetries and fracture-prone incisors are likely to be apparent by age 7. A seven-year-old also has the available growth that may be critical to an ideal treatment result.

**Q. Why is the term *dentofacial orthopedics* used in orthodontics?**

A. The objective of contemporary orthodontics is a well-proportioned face, as well as an esthetic and stable dentition. For that reason, the orthodontist must evaluate the dental arches and face in three dimensions of space: transverse, antero-posterior, and vertical. It is often through *facial orthopedics* that the orthodontist is able to achieve a treatment result with jaws in proportion to each other and to the rest of the face.

**Q. How should the child be managed when the need for interceptive orthodontics is unclear?**

A. There should be no concern about being “wrong” when the child who is referred does not need treatment. If in doubt, refer. There are three likely outcomes when a child is referred in a timely manner for an orthodontic screening. All of these are positive.

<i>Orthodontist's Recommendation</i>	<i>Potential Benefits of a Timely Referral</i>
Interceptive treatment is necessary	Prevent physical or psychological harm. Prevent the need for surgery or a compromised treatment result if growth is no longer available
Treatment is necessary but no need for interceptive treatment	Optimal treatment timing
No treatment needed	Peace of mind

**The bottom line:** Timely referrals of young patients can result in enormous, *even life-changing*, benefits for the patients. And, there is no downside. The “worst” that can happen is peace of mind on the part of the parent and the dental professional who takes no chances with the well-being of his/her patients.