Understanding Early Phase Treatment

The practice of orthodontics can correct many dental and skeletal related problems at any age. The types of orthodontic problems can range from simple tooth alignment to severe dental and skeletal abnormalities. Recognition of the more severe related problems can often be detected at the early years of dental and facial development. Dentists are trained to recognize these potential problems and when necessary, refer these patients to an orthodontic specialist. Sometimes patients may be referred as early as seven years of age. It is recommended by the American Association of Orthodontist that patients are referred to an orthodontic specialist at this age when certain problems are observed. Tooth eruption and skeletal development at this stage can be very beneficial to intercept developing dental and skeletal problems.

Orthodontic treatment can be classified in two categories. Early, or Phase I interceptive orthodontic treatment (when the teeth are still in transition from primary to permanent teeth) or late, Phase II, orthodontic treatment (when the permanent teeth have erupted and the primary teeth are no longer present). Another phase of orthodontic treatment to consider is the retention phase of treatment. This phase of treatment is just as important as the active treatment phases since jaw and facial development will continue in adolescence and wisdom tooth eruption, among other factors, may also have an effect on tooth alignment.
Early, or Phase I, orthodontic treatment refers to treatment that precedes conventional treatment protocol in which brackets and bands are placed on the erupted permanent teeth. This early treatment is initiated during the transitional dentition to intercept malocclusions (bad bite patterns) in a manner that will ultimately lead to a better, more stable result than that which would be achieved by starting treatment later. According to a survey of orthodontists, the benefits of early phase treatment include:

- Greater ability to modify skeletal growth
- Improved patient self-esteem and parental satisfaction
- Better and more stable results
- Less-extensive therapy is required later
- Reduced potential iatrogenic tooth damage such as trauma, root resorption and decalcification.

However, parents often ask me during a consultation if the recommend early phase treatment is absolutely necessary. My response may vary depending on a number of factors. Every patient may be at different levels of physiological growth and tooth development during their pre-adolescent years. Gender can also have an impact on the decision of early phase treatment. In patients requiring arch development or widening of the jaws, they may require an appliance such as a palatal expander. This appliance is more effective in the earlier stages of development before the skeletal sutures of the skull fuse and can no longer be manipulated. Female patients may undergo skeletal maturation much earlier than a male patient and therefore require a more assertive treatment approach. NS for the orthodontist are the potential of adverse contact of the brackets with the lower teeth and therefore a transient change in an individuals bite may
The role of the orthodontist is to evaluate all of the factors involved when creating a treatment plan, and to predict the best time to implement treatment. The reasons for correcting an orthodontic problem at an early age should be explained to the patient and the parents. Generally the goal of early phase treatment is to guide or correct developing aberrant bite patterns and improve guidance of erupting permanent teeth. Conditions such as arch-length discrepancies (inadequate space for teeth to erupt) and transverse or cross bite patterns benefit for early phase treatment. Moderate to severe over bite (Class II) patterns and underbite (class III) patterns are also addressed with Phase I treatments. There are many other reasons to recommend Phase I treatment and each should be discussed in reference to the risk/benefit of the treatment prescribed with your Orthodontist. We are very fortunate to have many very qualified clinicians in our area to provide for your families orthodontic needs. Keep in mind that there are many different treatment modalities and philosophies. Although treatment recommendations may appear different, the ultimate goal is the same. To create a beautiful, functional smile that will help build the confidence in your child to greet the world.
The following list from the web site of the American Association of Orthodontist can help in your decision for early orthodontic evaluations.

1. Early or late loss of baby teeth
2. Difficulty chewing or biting
3. Mouth breathing
4. Finger sucking or other oral habits
5. Crowding, misplaced or blocked-out teeth
6. Jaws shifting, make sounds, protrude or are recessed
7. Speech difficulty
8. Biting the cheek or biting into the roof of the mouth
9. Protruding teeth
10. Teeth that meet in an abnormal way or don’t meet at all
11. Facial imbalance or asymmetry
12. Grinding or clinching of teeth

For more information for your families orthodontic needs or to find an orthodontist in your area visit the web site of the American Association of Orthodontist at www.braces.org