

Advantages of Early Orthodontic Care

By Dr. Michael Williams

Probably one of the most commonly asked questions by parents making inquiries to orthodontic offices is “When should I bring my child in for an examination to see if he or she will need braces?”. In the past, it was commonly believed that a patient should not consider visiting an orthodontist until age 12 or so, when all the permanent teeth have erupted. However, recent advances in early orthodontic treatment have made it advantageous for children suffering from some forms of orthodontic and/or dental jaw deformities to see an orthodontist for the first time by the age of seven when the permanent first molars and incisors have erupted. In instances of underbites (protruding lower jaw), crossbites (due to a narrow upper jaw), or severe overbites (due to receded lower jaw) and even earlier examination by an orthodontist is indicated. Until the age of five, the main growth of a child’s head is the neurocranium or braincase. After age five the oral facial area of the child’s head becomes the dominant growth area with the emergence of the face from under the cranium or skull. Delaying treatment until age 12 will result in the loss of valuable growth potential for a large number of patients, especially females who are well into the last pubertal growth spurt by age eleven. An important consideration for early orthodontic treatment should be the face, due to the fact that the face has more visible and structural disharmonies than any other part of the body. During the early phases of development of a child’s head and face, the bones and teeth are more readily adjusted allowing for an easier correction of any jaw and bite irregularities. The formation of these facial imbalances are not solely the result of abnormal growth and development due to genetics, but can also be the result of abnormal environmental factors such as mouth breathing, thumbsucking, tongue thrusting, ect... The conditions, if undetected until a later, may worsen and require a surgical procedure and/or the extraction of multiple permanent teeth to make the correction.

Observation of the developing dentition and bite through the various stages of facial development is just as important as watching for the appearance of cavities in the teeth. If a parent feels that their child might be developing an abnormal jaw or bite relationship, a consult with either the family pediatrician or dentist is recommended in order to confirm any abnormal growth. Once abnormal development has been confirmed, the parent should obtain an appointment with an orthodontist for a complete diagnostic evaluation. Parents may also, at any time contact an orthodontist directly without referral. Failing to recognize a developing malocclusion (bad bite) may result in permanent damage to the adult dentition.

Many times, abnormal skeletal development of the jaw and face are the direct result of underlying medical problems such as partial obstruction of the nasal airway by enlarged tonsils and adenoids, or deviated nasal septums, hypertrophic nasal turbinates, or nasal polyps. Even something as simple as chronic childhood allergies or respiratory disorders can lead to abnormal facial development through mouth breathing caused by swollen airway tissues. It is crucial that proper diagnostic records and tests be made to correctly evaluate underlying causes of airway obstruction prior to implementing the early phase of orthodontic treatment. Early recognition of such conditions allows interceptive

orthopedic treatment, which can stimulate underdeveloping jaws to grow correctly and bolster the potential for success.

Often when treating cases with skeletal disharmonies, two distinct phases of treatment occurs when more baby teeth than permanent teeth have erupted, and is designed to develop jaw structures into proper alignment and shape to give the patient improved skeletal and facial balance. The early phase of treatment is usually started between the ages of 6 and 10, and may last 6 to 24 months. The second phase of treatment is usually initiated when all of the permanent teeth have erupted and employs the placement of braces on the teeth. Sometimes the first phase of treatment can eliminate the need for a second phase, but this is rare. The early phase of treatment will correct some skeletal and facial problems and reduce the severity of others, but will not eliminate all these problems since most of the permanent teeth are still unerupted. It is the second phase that the final details of tooth position and bite relationships are established. Often the early phase of treatment will allow a patient to be treated without the need for extraction of permanent teeth, which otherwise would have resulted in a less pleasing facial appearance. Planning the placement of the upper and lower front teeth for the end of treatment to maintain or create a good facial profile with a normal jawline for the patient is a paramount concern of the trained orthodontist. It is important to remember that early treatment allows us to obtain results, which would be impossible if intervention was postponed until a later age. A final but often overlooked reason to begin early treatment is for the patient's psychological well-being. It is essential that a child develop a positive self-image in order to properly interact with other children. Deformities of the face and mouth can have severe negative psychological effects on the overall development of a child's personality due to their physical appearance as well as having adverse effects on their ability to speak correctly, often making even the brightest child feel inadequate and lack confidence to achieve at the same level as his friends.