

Modern Orthodontics: An innovative approach to orthodontic treatment and facial beauty

As parents we absolutely want what is best for our children in every way. Many parents are well aware of the specific milestones that our children should reach during the first eighteen months of life however there are several important growth and development factors that must be evaluated in each child during the first decade of life. Surprisingly it is your child's dentist who becomes the guardian of normal facial growth and development. The role of your dentist is more than just taking care of your child's teeth. The goal of most every dentist is to monitor and guide the growth and development of young children to achieve the following:

1. A Pleasing Face which equals Optimal Esthetics
2. A Beautiful "Full Smile"
3. A Normal and Functional Bite
4. No TMJ Problems
5. A Lifetime of Oral Health

Many parents are unaware that 60% of their child's facial development is completed by Age 8 and that 90% of facial development is completed by Age 12. This means that the earlier your child sees a dentist the better the opportunity to detect and correct any growth and development problems that may be present.

Facial growth is the sum of the individual growth of each bone which comprises the face. There are several influences which can cause an unequal growth of a child's face and this imbalance may affect a child's health and appearance. A normal balanced face is the result of more than just bone growth it is the balance of normally functioning muscles, proper nutrition and the ability to breathe normally. Scientific literature and studies have shown that when these delicate balances are altered changes in health and appearance occur.

One of the most common abnormalities in a child's facial growth and development is caused by a compromised airway or quite simply stated - The inability to breathe properly through the nose. Children who cannot breathe well through their nose will tend to breathe through their mouth. This sets up a chain of events which may severely impact not only the health of a child but also the way a child's facial features develop and ultimately the way a child looks as an adult. The most common causes of altered breathing are:

1. Enlarged Adenoids
2. Enlarged Tonsils
3. Deviated Septum (Nasal obstruction)
4. Allergies
5. Chronic Sinus Infections
6. Breathing – Lips apart
7. Chapped Lips and Soft Tissue Gingivitis
8. Venous Pooling Beneath the Eyes – Dark circles beneath the eyes
9. Change in Head Posture – Posturing the head forward and/or tipping the forehead backwards
10. Tonsil and Adenoid Problems – Chronic sinus problems, throat problems
11. Snoring – Children do not usually snore
12. Loud grinding of teeth during sleep
13. Bed wetting
14. Reflux in the Eustachian Tube – Leads to inner ear infections

The effects of a compromised airway on the growth of a child are revealed in many ways. The tongue often positions itself snugly in the lower jaw to allow a child to breathe more readily through the mouth. This in turn changes the growth of the lower jaw so that it grows more vertically. This change in growth direction makes the child's face grow longer. At the same time since nasal breathing is severely compromised, the upper jaw and midface (the nasal bones, cheek bones, and bones supporting the tissue of the face) fail to develop at a normal rate because the natural growth stimulant of air flow through the nose is absent. This results in a deficiency of growth of the upper jaw and midface which added to the long facial growth from the lower jaw directly impacts the facial balance and beauty of a child and later as an adult.

As parents we often see the signs of airway problems however they often go unnoticed. Here are a few common symptoms of airway problems:

When corrected early in a child's life the facial growth is encouraged to return to harmonious growth and development. In those cases where facial growth changes are significant and facial harmony is disrupted, the dentist may intervene and guide the child's growth back to normal. Using various appliances the dentist can actually modify the abnormal growth pattern and restore the balance of growth that nature intended. Taking your child to the dentist as early as possible, yes even at age 3, is very important. Here are four advantages of early examination and diagnosis and treatment:

1. Removes harmful factors influencing growth
2. Excellent ages for growth guidance and restoring normal growth
3. Assists in improving the psychological well-being of the child
4. Saves some patients from future jaw surgery