

## FOCUS ON BEAUTY & FUNCTION

### *A New Age of Orthodontics—Part 1: Early Treatment*

*by Juan-Carlos Quintero, DDS, MS*

Do you long to have a beautiful smile composed of properly aligned teeth? Do you have functional concerns for your jaw as you chew? Are you concerned about the esthetics of your child's smile and whether it will develop into a beautiful one? Does your child have an abnormal bite or crowded teeth?

If you said yes to any of these questions, it's likely that your Pankey Institute-trained dentist has already anticipated your desires and concerns. Your dentist may have recommended that you consult with an orthodontist.

If you are consulting with an orthodontist recommended by your dentist, you are in fine company. More and more people are seeking orthodontics as a component of comprehensive oral health care that will ensure proper facial development, preserve natural teeth, eliminate jaw pain, and provide for a naturally beautiful, young-looking smile.

Recent information about how the face grows, smiles develop, and both continue to change throughout life have brought the field of Orthodontics to a new age. No longer must we wait for the teenage years to correct orthodontic problems. **No longer is treatment limited to adolescents but is now available to patients of all ages and, more importantly, to children early in their life.**

This article will focus on orthodontics early in life. A subsequent issue of this newsletter will discuss advances in orthodontics for adults.

Orthodontists have always had the option of treating early. Until recently, though, treatment basically amounted to holding or maintaining space. The window of opportunity to develop arches and correct severe problems such as

crowding was missed. If the jaws were too small there still wasn't enough room for all of the permanent teeth. Many times, permanent teeth were removed to make room to properly align the remaining teeth.

Teeth and bone are the supporting structures of the face. When permanent teeth are extracted, facial profiles often become less attractive. Faces can become flattened in appearance or collapse showing a decrease in lower facial height. Bites can collapse resulting in more overbites, increase in tooth crowding, gum problems, and even jaw joint (TMJ) problems. Smiles can collapse with lips becoming pencil-thin rather than full and attractive, and smiles can become narrower. Noses can look larger than they really are.

From day one of my practice, I decided to avoid extracting permanent teeth whenever possible. I swore never to treat the bite at the expense of the face. For the past six years, our practice has used early two-phase treatment to both hold **and gain** space in the jaws for incoming permanent teeth. We concentrate on the proper development of the upper and lower jaws, as well as the development of the gums and bone supporting the teeth.

This has been accomplished through various types of expansion appliances, as well as braces. When used properly these create healthier gum and bone tissue around the teeth, make enough room so the permanent teeth do not need to be removed, ensure that the patient develops the most pleasing face possible, assist in creating a naturally beautiful smile, reduce the need for corrective jaw surgery later in life, and eliminate the use of appliances that pull

the lower jaw forward and are uncomfortable to wear.

The tooth straightening portion of orthodontic treatment has also been revolutionized. Space age titanium wires allow us complete treatment in fewer visits and with very little discomfort for the patient. It is routine now to use clear, non-staining ceramic brackets to hold the wires instead of metal which means they are more attractive to wear.

I recommend that children be seen for the first time at four or five years of age to check facial development, although treatment this early is usually not necessary. Since most facial growth occurs between ages 6 and 10 (90% by age 10), it is important to begin any needed facial growth modification treatment during this window of opportunity.

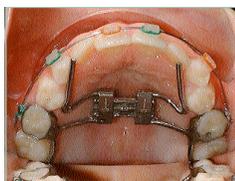
The American Association of Orthodontists (AAO) has issued the clear recommendation that all children be seen by an orthodontic specialist for an orthodontic evaluation by the age of seven. Conditions warranting early orthodontic intervention include cross-bites (some of the upper teeth are inside the lower teeth when biting), permanent teeth erupting in the wrong place or at an abnormal angle, the lower jaw outgrowing the upper jaw, a severe overjet (upper jaw extending beyond lower jaw), a severe overbite (upper teeth overlapping the lower teeth when the jaw is closed), open bite (upper teeth do not make contact with lower teeth when biting), and crowded teeth.

Your Pankey Institute-trained dentist is qualified to explain and screen for these problems and will assist you in seeking the orthodontic specialist you and your family need.

## Early orthodontic treatment will make a big difference in young Daniel's life.



*At left, Daniel is shown at the beginning of treatment.*



*The second photo shows Daniel's upper palate as it is gently pushed to grow wider. This photo was taken 7 months after the start of treatment.*



*The third photo was taken at the end of Daniel's Phase I treatment. Phase I*

*usually lasts for 12 to 15 months. There is then a resting phase of 6 months to 2 years, followed by Phase 2 of treatment which may last from 10 to 15 months.*

## Phase I treatment for Estephania produced dramatic results.



*Estephania is shown before treatment. She was in phase I for 12 months.*



*Here are her results following Phase I growth modification.*

The information in this newsletter is general in nature and may not pertain to your specific oral health. For your specific oral health information, consult your dentist.

## Health Link

### SLEEP DISORDERED BREATHING

*by W. Keith Thornton, DDS*

#### Do you or a loved one snore?

Snoring occurs when a partial collapse in the throat causes vibration of the soft tissue as you breathe. Snoring usually begins as a mild noise occurring occasionally. As the condition worsens, usually with age and weight gain, it becomes continuous, loud, and obtrusive, indicating a greater collapse of the throat.

If the breathing effort interrupts the patient's sleep, the condition is known as "upper airway resistance syndrome." For many people, the throat continues to collapse to a point of total blockage, causing a cessation of airflow, and this condition is called "obstructive sleep apnea."

Research indicates that people with obstructive sleep apnea are deprived of significant oxygen during their sleeping hours and are at higher risk for irregular heartbeat, high blood pressure, heart attack, and stroke.

Although less of a health problem, the fragmented sleep resulting from simple snoring can cause headaches, difficulty in concentration, fatigue, and reduced work performance. Not only does the snorer suffer from interrupted sleep but also anyone awakened by it.

#### Who has sleep apnea?

According to the National Sleep Foundation, as many as 18 million Americans have obstructive sleep apnea. It occurs in all age groups and both sexes but is more common in men (4% compared to 2% of women).

You are most likely to develop sleep apnea if you are overweight, have high blood pressure, or have a physical abnormality in the nose, throat or elsewhere in the upper airway. Ingestion of alcohol and sleeping pills increases the frequency and duration of breathing pauses in people with this condition.

#### Treatment

Treatments for snoring and obstructive sleep apnea fall into three categories. The first is surgery to remove some of the soft tissue of the upper airway or surgery to move the upper and lower jaws forward to open the airway. The second is wearing a mask attached to a machine while you are sleeping that provides continuous airway pressure to keep your throat open. The third is wearing an oral device that has been properly constructed for you to adjust and retain your jaw in a favorable position for breathing while you sleep.

More people select the third category of treatment because it is non-invasive, less expensive, and reversible. It also can be provided and adjusted by your dentist. Most people receiving this treatment find it comfortable and therefore comply with their physician's or dentist's recommendations to wear it. They report getting a better night's sleep and know their health is improved.

#### Your dentist ...

Your dentist may be among those who have undertaken a course of study on sleep disordered breathing so they can appropriately treat their patients with the problem. Your Pankey Institute-trained dentist knows how to work with the medical community to help you receive the health evaluation and treatment that achieves the best results.