



The nose knows

By Dr Barry Raphael

After three decades practising orthodontics, including experience with the “muscle-centric” philosophy of orofacial development, I was recently asked to provide a summary of the “big picture” for a group of Buteyko practitioners who were not familiar with myofunctional orthodontics.

Here is my response:

At issue is the head-on collision of the human face with the modern environment. Anthropology demonstrates how the human face has changed in the past several hundred years, presumably as a result of the many stressors which have created the “over-breathing” which Buteyko addresses. The ensuing open mouth posture prevents the tongue from fulfilling its role as scaffolding for the developing maxilla (just as the eyes are the scaffold for the orbits and the brain for the cranium) and allows this bone to collapse downwards and back into the face, severely restricting space for erupting teeth. As a result, the mandible is forced to cope with a distorted upper partner. It compensates in a variety of ways, all of which result in facial deviations from ideal.

The biggest concern is this damage starts very early in life and by the time a child’s teeth have crowded and they are

considered ready for braces, it is too late to prevent it. Consequently, traditional orthodontics operates as a compensation for misshapen jaws (80% of the time to my estimation) and in the case of using extractions to relieve the crowding, is actually locking in the problem permanently by collapsing the dental arches in order to match the collapsed skeletal arches.

In addition to the aesthetic problems associated with profile and smile, a misshapen face can cause a variety of health issues. An elongated face is a risk factor for sleep breathing disorders since the airway is often more narrow in the throat. Stresses are placed on the jaw joints, often creating dysfunction or causing pain. A lowered tongue posture leads to muscular dysfunctions that place additional stress on the teeth, jaws, cranial bones, joints and airway. It is a messy situation and it seems increasing in frequency and severity with each generation.

In my opinion, the best treatment approach is preventive. Even when orthodontists try to intercept the issues leading to open mouth posture (a dissertation in itself), the longer the delay in starting treatment the more damage that must be dealt with. By adulthood, not only is the original facial damage present but so are all the secondary effects these stresses have created, including wear and tear on the teeth and joints, long-standing muscle

and breathing dysfunction, musculo-skeletal issues and chronic inflammation in all parts of the body.

There are several treatment techniques designed to help the jaws grow to their full genetic potential. These, of course, work best in young, growing children, but can be beneficial at any age, albeit with varying degrees of success, since even a 5% positive change can have a large impact on an out of balance system. At the base of these efforts has to be the restoration of nasal breathing and correct breathing dynamics, without which all issues remain refractory.

About the author

Dr Barry Raphael has practised orthodontics for close to three decades. During this time, he has benefited from all the advances modern orthodontic treatment has to offer including functional orthodontics and low-force, low friction techniques. Relatively recently, Dr Raphael has recently begun to recognize the benefits of myofunctional therapy in his practice. He also has first-hand experience with moving from a “tooth-centric” philosophy of orthodontic mechanotherapy to a “muscle-centric” philosophy of orofacial development. Dr Raphael is in Specialist Private Practice in Clifton, New Jersey.