Form Follows Function: Optimizing Facial Growth And The Airway In Children
Using The Bioblock Orthotropic

Orthotropics is a branch of dentistry concerned with correct growth of the face and jaws. An appliance called the Bioblock Orthotropic was developed by Dr. John Mew of London, England in the 1950s to address the shortcomings of conventional orthodontic treatment, which merely straightens teeth. The first goal of the treatment, which is most effective for children under age 10, is to optimize facial development with the upper and lower jaws ideally positioned forward in the face, rather than with conventional treatment or no treatment.

The second goal is to correct the poor “resting” oral posture, which produced the unfavorable growth in the first place. In industrialized societies, the open-mouth posture is prevalent, and here in America, the typically poor eating habits of children exacerbate the problem of unfavorable growth.

The first obvious sign of unfavorable growth in a child’s mouth is a downward and backward movement of the upper front teeth. This can be easily identified by a simple measurement from the nose to the upper incisor teeth. Very seldom are the upper front teeth actually too far forward in the face. Even when they appear to stick out (in the example of buck teeth), they are usually too far back relative to the nose, cheeks, and forehead. A recessed lower jaw can easily give the illusion that the upper teeth protrude, even when they do not. This fact has been known for more than a quarter of a century but has been overlooked by most who provide conventional treatment. If ideal facial balance is the goal, this fact cannot be overlooked, and upper teeth must be moved forward instead of pulled back.

Verification of the validity of this approach is available in several forms. An unpublished article based on research done on a series of cases treated with the Biobloc method has scientifically proven that unfavorable vertical growth can be converted to favorable horizontal growth with the
Bioblock method. Improvements in the airway have been documented on the same sample of consecutively-treated patients. A comparison of facial balance in a series of identical twins, with one twin being treated conventionally and one treated with Biobloc Orthotropics, shows dramatically better facial balance with Biobloc Orthotropics.

Above is a 10-year old boy with a balanced face and a relaxed lip posture showing no strain and a proper lip seal and nasal breathing. Shortly thereafter he received a pet gerbil from his parents. Unknowingly allergic, his ability to breathe through his nose was reduced enough to cause mouth-breathing. This simple change in opening his mouth to breathe changed the position of his tongue muscularity, which altered his normal and proper tongue posture, and dramatically changed his facial growth. This type of growth is not genetically predetermined; it is a form that is caused by function. This can be subtle or dramatic like the example shown above. This growth pattern, left untreated, can lead to significant systemic, emotional, and physical health complications.

1 Components Of Class II Malocclusion In Children 8-10 Years Of Age,” by J. McNamara, Angle Orthodontist, July 1981.