 Achieving lifelong results with myofunctional treatment - Benefitting patient and dentist

By Dr Chris Farrell BDS, CEO & Founder of Myofunctional Research Co.

In the not too distant past, malocclusion was considered to be genetically inevitable and preventive treatment modalities were not considered viable, or profitable. Mechanically straightening the teeth via extractions and braces into an arbitrary Class I, then permanently retaining was considered the optimum treatment method, despite obvious limitations such as relapse and root resorption.

Today, three out of four children will develop malocclusion; fortunately, modern research has produced comprehensive evidence that demonstrates malocclusion is the result of improper jaw development caused by incorrect myofunctional habits, which become evident in the infant stage. As a result, dental professionals now have access to treatment methods that focus on unlocking a child’s inherent potential for growth and development to prevent serious malocclusion, rather than straightening teeth in a reactionary manner.

The premise of this modern myofunctional orthodontic approach involves the correction of poor oral habits, such as mouth breathing, tongue posture and swallowing patterns, setting the trajectory of growth in the right direction and allowing the jaws to develop into their full and proper size.

The Myobrace® System by Myofunctional Research Co. (MRC) is a myofunctional orthodontic treatment system providing dental practitioners with a cohesive, functionally-
designed treatment, which packages habit correction, arch development, dental alignment and then retention. By using a structured approach that integrates patient consultation, evaluation, diagnosis, treatment, education, clinical management and health goals, dental professionals can treat more children earlier than previously possible, increase patient flow, diversify treatment by offering solutions for Sleep Disordered Breathing (SDB) and improve practice efficiency. In addition to enabling the practitioner to access new revenue streams during a period of upheaval in the profession, myofunctional orthodontics provides patients with a modern treatment modality targeted towards treating the causes of malocclusion rather than just the symptoms.

The first step to implementing these contemporary treatments into the practice is a change in mindset. The realisation that in order to thrive within the new corporate landscape, dental professionals must be willing and capable of playing a role in their patient’s overall health and wellbeing, rather than rely on providing patients with the provision of the traditional check, x-ray, scale and clean service. Because myofunctional orthodontics is biologically-based, with the aetiology of the issue at its core and built on a foundation of patient education with emphasis on habit correction as well as nutrition and diet, it provides dental practitioners with the potential to have a lifelong beneficial impact on their patient’s health.

My previous article (ADP May/June 2016: Screening for a new revenue source) outlined the methods used to screen patients for myofunctional treatment as well as the initial steps required to implement it into the practice. This initial implementation process, detailed:
• Parent/Patient Education;
• Evaluation;
• Record taking;
• Case presentation; and
• The treatment plan.

Once the goals have been adequately established and the patient/parent has accepted the plan, treatment can commence. In the same way that MRC has developed a protocol for screening patients and initiating treatment, in order to make it as straight forward for practitioners and patients as possible, The Myobrace System consists of four treatment stages, which are fundamental in achieving positive myofunctional orthodontic results.

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1. Habit correction

The initial focus of myofunctional treatment is habit correction. In order to unlock the patient’s inherent potential for natural growth and development, the habitual upper airway or orofacial muscular dysfunction which restricts this must be addressed. This is achieved via a combination of intra-oral appliance use (1-2 hours each day and overnight while sleeping) and myofunctional activities, which are designed to encourage nasal breathing, correct tongue posture, teach the correct swallowing technique as well as strengthen and develop the orofacial musculature.

Because diet and nutrition can play a role in treatment success, interactive educational programs that teach children about good dietary habits are also introduced during this stage.

Compliance is a vital factor in achieving the best possible outcomes during this early stage of treatment and the patient/parent is made aware of the active role they must play in their own treatment. Exceptional results are possible but commitment to the treatment is required to achieve them.

2. Arch development

While traditional treatment relies on extraction of often healthy teeth to create space for the teeth to align mechanically, Myobrace treatment promotes biologically-based arch development, allowing the teeth to align naturally. In partnership with the tongue, the appliances in this treatment stage feature design attributes that help develop the arch-form allowing sufficient space for the teeth. In patients with underdeveloped jaws and where there is limited space for the tongue, additional arch expansion techniques may be necessary. However, while
successful in widening the arch-form, traditional arch expansion appliances prevent correct tongue posture and therefore fail to address the cause of restricted arch development.

Myobrace arch development techniques such as the Farrell Bent Wire System™ (BWS™) (Figure 4) are based on allowing the tongue to posture correctly in the maxilla, which naturally assists with expansion and allows for more permanent results.

3. Dental alignment

As a result of correcting the orofacial musculature and airway function in combination with the intraoral appliance during myofunctional treatment, dental alignment occurs. Once functioning correctly, the force exerted on the dentition by the cheeks, lips and tongue muscles is capable of moving the teeth into their natural alignment. With good compliance, which is essential to achieving the best possible outcome, the intraoral appliance assists with this and helps to ensure optimum dental alignment for each patient.

4. Retention

Unless there is permanent retention put in place, relapse with traditional treatment is all but guaranteed. However, retention of outcome is the final stage of myofunctional treatment with the aim to ensure corrected upper airway and orofacial muscular function is maintained. If the patient does maintain this correct function, the necessity for indefinite retention can be avoided.

Conclusion

With positive compliance during the treatment process and providing correct function is maintained, positive outcomes achieved by myofunctional orthodontic treatment can have a lifelong impact on the patient’s health and wellbeing. In order to attain these outcomes, the patient is provided with the education and resources to ensure their best possible treatment results are achievable. Furthermore, as well as digital components designed to educate, foster compliance and make treatment as straightforward as possible for the patient, MRC has developed a suite of online and digital resources to ensure dental practitioners are able to seamlessly integrate myofunctional treatment into their practice then provide it for their patients in the most efficient and profitable way possible.

To learn more about MRC’s patient education programs and to begin implementing the myofunctional treatment systems into your practice visit the courses section at www.myoresearch.com/courses.