Orofacial Myofunctional Therapy

A personal journey

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I was first introduced to Orofacial Myofunctional Therapy (OMT) in 2016, whilst searching for ways to help my then 14 year old son who was struggling at school. He had experienced concentration issues since the age of six and was diagnosed with dyslexia in 2013, aged 11. He was predicted to fail all his GCSE's and his teachers were suggesting a non-academic route for his future. In November 2017 he was diagnosed with ADHD and prescribed medication. I was desperate to search for alternatives as the drugs made him feel dull, slow and reduced his appetite.

Whilst searching for alternatives to the conventional treatment on offer, I read a paper highlighting the importance of nasal breathing for brain and body oxygenation.[1] This led me to investigate mouth breathing and Orofacial Myofunctional Disorders (OMD). I found a course By Dr. John Flutter (DDS, Australia) on myofunctional orthodontics and the importance of early intervention, helping to promote facial growth and exclusive nasal breathing. The course provided an introduction to myofunctional orthodontics with the aid of appliances and myofunctional exercises. I enrolled and was enthralled by the training and knowledge I gained and the ability to effect so much change and development without the traditional interventions.

I returned home keen to know more and started researching further into myofunctional disorders. It was through this research that I discovered Joy Moeller (RDH OMT). Her OMT journey was truly inspirational and it resonated so much with my own story. Before I knew it, I was on a plane to Estonia to train in myofunctional therapy. I gathered all the photos I had of my son on my phone - in every single one he had his mouth fully or partially open, and wide open at night. It was now very clear to me that he had a low tongue posture: he was a habitual mouth breather, at risk of needing orthodontic treatment, was developing allergies and suffering recurrent colds. It now made total sense why as a toddler he had suffered from recurrent tonsillitis and sinus problems.

On my return from Estonia I started working with my son with a combination of myofuntional therapy and myofunctional appliances using a multidisciplinary approach. This involved: myofunctional therapy; a dentist specialising in functional tongue tie release; a chiropractor; sleep hygiene; and Cognitive Behavioural Therapy (CBT).

The change was incredible. He very quickly moved from habitual mouth breathing to nasal breathing. His teeth had a better alignment and his attention span started to increase. His behaviour at school improved and he achieved nine GCSE's in August last year.

He is now studying media at his dream college, is no longer taking ADHD medication and his posture has improved. We are extremely proud of him but are very aware that he is one of the lucky ones. Our story could have been very different had I not discovered early intervention myofunctional orthodontics and myofunctional therapy. Even with a mum working as a Dental Hygienist and Therapist, he could have been one of the many with undiagnosed Sleep Disorder Breathing (SDB)[2] (Fig.1).

FIGURE 1: MOUTH BREATHING

Orofacial myofunctional therapy (OMT)

OMT (also known as Orofacial Myology) is the neuromuscular re-education or re-patterning of the oral and facial muscles, helping restore function to the stomatognathic system. This system comprises several parts working as a single unit for the purposes of:

1. Mastication
2. Deglutition
3. Phonation
4. Respiration
5. Other behavioural characteristic or activities

Normal oral resting postures and muscle functions are essential for proper growth, breathing, facial and dental development, physical health as well as speech and language development. Correct swallowing depends on a proper relationship of the muscles of the mouth, throat and face. To swallow properly the muscles and nerves of the tongue, cheeks and throat must co-ordinate.

Because a person swallows between 500-1000 times a day, improper swallowing can cause a variety of problems, but it is the constant force of the incorrect resting position of the tongue that causes the most damage.

The importance of the tongue

The tongue acts in harmony with all the other muscles involved in swallowing and exerts forces close to 500 grams, that ideally should be absorbed by the hard palate. The force created by the tongue applied correctly to the hard palate helps shape the upper arch and keep the teeth aligned. The lower arch in turn follows the upper arch during growth and development.

When swallowing incorrectly the forces of the tongue can apply pressure to the teeth forcing them into misalignment, and a poor lip seal often exacerbates this. The lips can apply a force on to the teeth of roughly 300 grams. Having a poor lip seal (open mouth posture) and a tongue pushing on the teeth (tongue thrust) can rapidly misalign the teeth and change the shape of the developing jaw. Therefore, correct chewing and swallowing, a good lip seal and exclusive nasal breathing are very important during the craniofacial development and for the correct continued functioning and shape preservation of the orofacial structures.

The tongue is a muscular organ with eight pairs of muscles working in synchrony to aid mastication, swallowing, digestion, speech and breathing. The fibres of the muscles of the tongue are attached to several craniofacial skeletal sites, including the hyoid bone, the temporomandibular joint (TMJ), and the structures of the inner ear, the maxilla and the mandible. A tongue-tie, or reduced tone/function of the muscles of the tongue, can affect not only function but also the craniofacial structures linked to the tongue, causing disorders of the orofacial complex.

Figure 2: A 34-year-old with undiagnosed tongue tie, tongue thrust, TMJDs who suffers from migraines and stomach issues (bloating). She exhibits a high and narrow palate, snores and is tired and lethargic during the day.

Orofacial Myofunctional Disorders

The orofacial complex is biologically an organ system of its own and works in an integrated manner to provide the individual with the function of mastication, swallowing, breathing, speech and the senses of smell, taste and vision. Disorders of the orofacial complex may be referred to as Orofacial Myofunctional Disorders (OMD). OMD may directly or indirectly affect occlusion, TMJ movement, posture, sleep apnea, speech, facial skeletal growth and development, oral hygiene, facial aesthetics, breathing, chewing, stability of orthodontic treatment, forward head posture, incorrect oral habits and more.

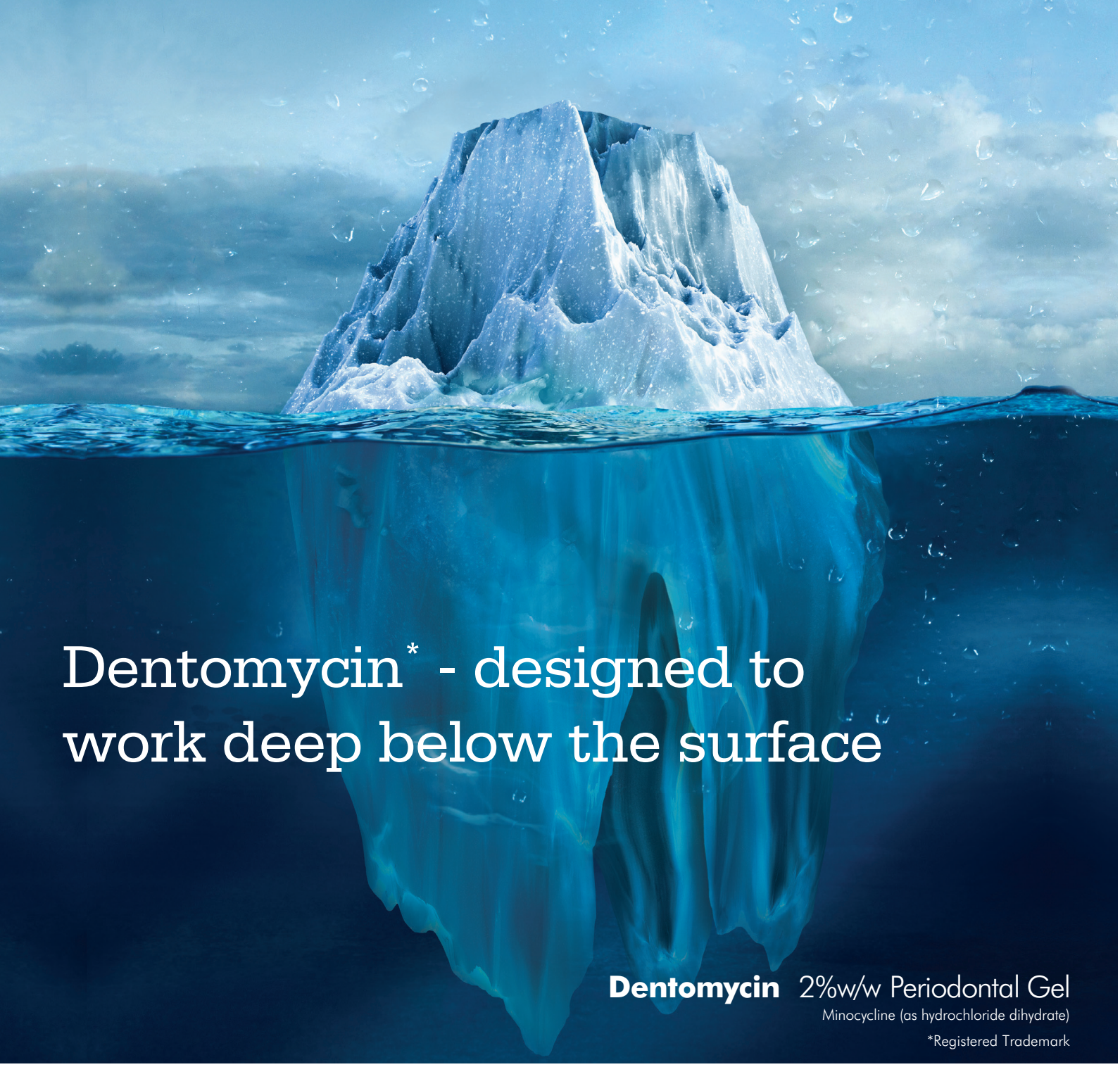
When the tongue rests low on the mandible or against the teeth, as a result of a tongue-tie or habitual or pathological mouth breathing, the relationship between the tongue and the palate is interrupted. When the tongue is not in contact with the palate the upper arch develops unguided and unsupported, this encourages the development of a high and narrow palate, restricting the maxillary arch forward growth and narrowing the nasal cavity.

Malocclusions, speech problems, grinding, clenching, migraine and orofacial tension may develop from OMD. Recent research has shown that myofuctional therapy can reduce the symptoms of SDB, such as snoring and ameliorate mild to moderate Obstructive Sleep Apnea (OSA). When functioning properly the muscles of the tongue, throat and face can reduce obstruction of the airway.

OMT combined with Buteyko breathing re-education seeks to re-train and re-pattern the stomatognathic system to work in optimal form.

A properly trained Orofacial Myofunctional Therapist works as a member of a multidisciplinary team aiming to successfully treat OMD, working alongside and in cooperation with Dentists, Osteopaths, Orthodontists, Lactation consultants and ENT's, looking at patients' complaints from a variety of approaches in order to provide a successful treatment.

Figure 3: A 5-year-old who snores, has recurrent headaches, grinds her teeth and suffers recurrent tonsillitis and ear infections. She is a mouth breather day and night and has a high and narrow palate. Her tonsils occupy over 80% of the pharyngeal space.



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OMT is not a new concept. It was first noted as early as the beginning of the twentieth century when Orthodontists, Edward Angle and Alfred Rogers, documented their observations of parafunctional habits, muscle function, and dental occlusion.[3]

Orofacial Myofunctional Therapy has gained popularity in the USA and around the world. Unfortunately, there are only a handful of OMT currently practising in the UK and I feel very fortunate to be one of them. OMT has truly transformed the way I assess and treat my patients in my daily practise and has added a whole new dimension, enabling me to work holistically. I am privileged to be a member of the Scientific Committee for the Academy of Applied Myofunctional Sciences (AAMS), helping further the field of OMT in Dental Hygiene.

I would argue that there is a need for education: more information for the general public and for healthcare professionals.

There is currently no training available in the UK, however, the AOMT has agreed to run an OMT introduction four day course in June 2019, hopefully the start of many. It would be great to see more Myofunctional Therapists in the UK soon.

For more information on OMT training, congresses, summits and continued education, please visit:
www.AOMT.gov www.aamsinfo.org
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About the author:

Yulli is the Founder and Director of My Dental Hygienist Clinic and Myofunctional Therapy UK. She has over 22 years dental experience and is a Dental Hygienist and Therapist graduating King's College London Dental Institute. Yulli is the Founding President of the British Society of Myofunctional Therapy. The aim of the society is to raise public and professional awareness of Orofacial Myofunctional Disorders (MOD), highlighting the early signs of Sleep Disorder Breathing (SDB) and its correlation with poor orofacial development and mouth breathing.

Yulli has the privilege of being on the scientific committee at the Academy of Applied Myofunctional Sciences and presented clinical material at the first Myofunctional Therapy symposium at the Royal Society Medicine.

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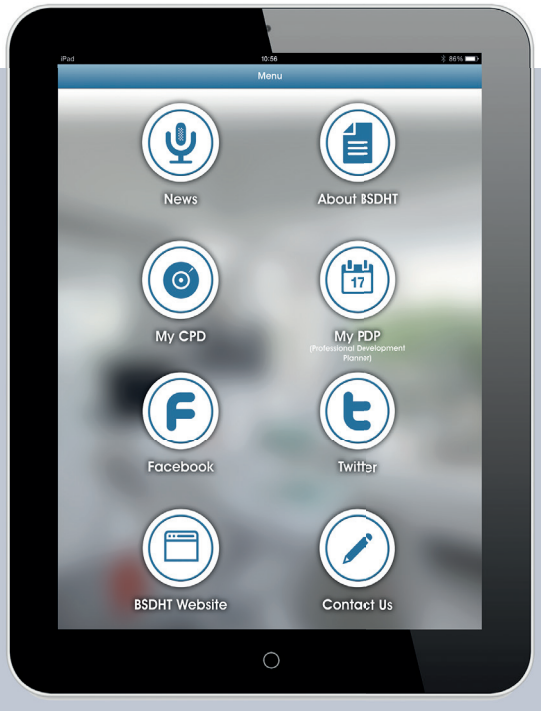
WE ASKED YOU…

During the OHC in Belfast last year, and then throughout the month of January on line, we asked you our readers a number of questions relating to our BSDHT publications.

A total of 554 of you took the time to respond of which 32% said that you 'always' undertake the CPD in *Dental Health*, 46% of you 'sometimes' and 22% of you 'never' do.

We hope you all find something of relevance to your daily practice in this issue.



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