



“WHEN CHILDREN BREATHE THROUGH THEIR MOUTHS, INSTEAD OF THEIR NOSES, IT SETS IN MOTION A CHAIN OF REACTIONS THAT INCREASE THE RISK OF DEVELOPING TMJ PROBLEMS.”

Shortly before heading off to her first year of college, Ariayna Meyer met with Dr. Ferzli to adjust her new appliance.



From Intense Pain *to Progress to Relief*

As a teenager, Ariayna Meyer first met Dr. Charles Ferzli, of TMJ & Sleep Therapy Centre in Cary, four and a half years ago, under less than ideal circumstances. She describes the onset of her temporomandibular joint (TMJ) issues, when “I just started feeling a really sharp shooting pain in my jaw, and then it got to the point where I couldn’t open my mouth more than the width of one or two fingers. And my jaw was stuck in that position for months.” Her dentist referred Ariayna and her mom to Dr. Ferzli, who is broadly recognized as an expert in dealing with TMJ and airway issues.

WHAT CAUSES TMJD (TEMPOROMANDIBULAR JOINT DISORDER)?

TMJ issues can stem from many factors, explains Dr. Ferzli, among them: diet, environmental toxins, technology, hormones, genetics, and—maybe most importantly—mouth breathing.

“Our diet does not support proper facial and jaw muscle development,” he says. “When we don’t give children hard foods to chew on so those muscles can develop properly, we see the onset of weak musculature, exacerbated by more soft foods and a fast-food diet. Indigenous cultures with natural foods tend to have bigger dental arches, leading to fewer of the crowding and dental issues we see in the Western world.”

That same poor diet, he notes, when coupled with environmental toxins, “means that we have children who have more inflammation in their systems and are more sensitive to pain.” Hormones play a role as well, says Dr. Ferzli, noting that girls in puberty are more prone to TMJ issues, given the increase in estrogen and heightened sensation of pain.

Another culprit is the ubiquitous cell phone. “The vast majority of kids today,” Dr. Ferzli points out, “spend a large

amount of time on their phones texting, with their heads facing the ground. That posture contributes to increased inflammation in the system and more discomfort overall, along with musculoskeletal issues.”

MOUTH BREATHING

“Of the many contributing factors to TMJD,” observes Dr. Ferzli, “perhaps the most significant is mouth breathing. When children breathe through their mouths, instead of their noses, it sets in motion a chain of reactions that increase the risk of developing TMJ problems. There’s a forward head posture that puts strain on the neck and back; that causes the jaw to drop, affecting the growth and development of the child’s dental arches, and changes the tongue position.

“As a result, children develop a crowded mouth, and are more prone to cavities because of dry mouth. That’s the beginning of jaw problems, because if they cannot breathe through the nose, they’ll clench their teeth while sleeping. This abuses the skeletal musculature, eventually causing discs and joints to become more inflamed. The result: TMJD.”

A PATIENT’S JOURNEY

“Some people are predisposed to have TMJ problems—perhaps for genetic reasons or because of their anatomy,” notes Dr. Ferzli. “That may have been true in Ariayna’s case, or her TMJD may have been from a combination of factors.”

Whatever its cause, Ariayna’s condition dramatically worsened one weekend. Although she was scheduled to see Dr. Ferzli the following week, her mother, Holly, explains that “Ariayna’s jaw was locked for a good two or three days and she couldn’t even get her finger in her mouth.” Not only did Dr. Ferzli tell them to come in immediately that weekend, but spent several hours to help resolve the immediate locked-jaw issue.

Then the real work began, according to Ariayna, “I had to wear my appliance, and that’s what really, really helped me. I had a daytime appliance—to eat with and just do everything with, keeping it in at all times during the day. I removed that appliance for a nighttime device to stop my jaw from falling backwards. After I became faithful in using these appliances, I experienced really big, incredible improvements.”

MULTI-PRONGED APPROACH

Dr. Ferzli elaborates on this therapeutic approach, explaining, “Our goal is to get rid of the inflammation in the patient’s jaw joint system and body by decompressing the joint. We use multiple strategies to address all the symptoms of jaw pain, jaw locking, headaches, and neck pain. The process usually takes 10 to 12 weeks, and the level of success helps determine next steps. The

appliances Ariayna referred to are custom orthotic devices, which are often used in conjunction with myofunctional therapy.

“Myofunctional therapy,” he explains, “is a program of simple, specific exercises that target the facial muscles used to chew and swallow and tone the airway muscles. These exercises are very helpful in working with patients like Ariayna as a part of a comprehensive program.”

After six-months’ work involving orthotics and exercises, says Ariayna, “I was so much better that I felt ready to begin working with my orthodontist. I needed braces not just to straighten my teeth but to expand my airway, which is really constricted and prevents my breathing properly. Unfortunately, that’s where things went pretty much backwards—almost to square one—because the focus was more on getting my teeth straightened than expanding my airway.”

“It was frustrating,” says her mother. “Because during the process of her braces, Ariayna had to stop her work with Dr. Ferzli. And even though he tried very hard to make an appliance to go over her braces, nothing would fit. So, she was just stuck.”

Dr. Ferzli emphasizes that it’s optimal—but not always possible—to do his first phase work ahead of orthodontia to make room for the tongue and the airway and to line everything up to move correctly. But he also sees children referred to him from their orthodontists. Whatever his stage of involvement, Dr. Ferzli aims to relieve pain and restore function.

Now that her orthodontic work is complete, Ariayna has resumed her therapy with Dr. Ferzli and is looking forward to regaining her previous progress. As she describes it, her previous work with him “genuinely helped me relax my muscles and open my jaw. I remember at its worst, I was afraid I would never be able to open my jaw again, but after I started the treatment with Dr. Ferzli, it helped so much—and gave me a lot of hope.”

She’s looking forward to regaining that progress with Dr. Ferzli, whom she describes as “the one that really helps and cares about the actual issues and problems.” Strong praise from an adolescent—echoed by his adult patients, as well. **h&h**

IS YOUR CHILD A MOUTH BREATHER?

According to Dr. Ferzli, “We are born as natural nose breathers but sometimes circumstances alter our habits. If a child has a cold or congestion from an allergy, for example, they may learn to breathe from the mouth, and it can become a habit. And it’s now common to see kids with their lips apart, and no one knows to tell them to breathe through their nose.”

This can give rise to a number of serious health problems—including TMJD—he says. For example:

Mouth breathers are more prone to developing asthma. Proper nose breathing helps clear the sinuses and release nitric oxide to the lungs. Its antibacterial, antifungal, and antiviral properties mean that upper respiratory infections, bronchitis, or asthma are less likely than for mouth breathers.

They are more likely to get temporomandibular joint (TMJ) problems. Since they can’t or don’t breathe from their nose, they clench their teeth while sleeping, eventually causing the discs and the joints to become inflamed.

They may have more pain overall. Mouth breathers don’t release oxygen as efficiently to the muscles, causing more pain and inflammation. And those with TMJ may experience headaches, neck pains, and more—in addition to jaw pain and locking.

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