

Was Surgery Necessary?

Resolving One Patient's Pain After Radical Procedures Fail

Don't be fooled by what appears to be a simple temporomandibular disorder (TMD) or a facial esthetics case. When diagnosing orofacial pain and TMD, we need to consider a variety of factors in order to provide the highest quality frontline treatment to our patients.

Dental professionals may make the mistake of thinking that a patient's problem is limited to TMD and orofacial pain, when, in fact, the patient also may have obstructive sleep apnea. We can't treat the former issues without also addressing the latter. What's more, any treatments for these conditions also will directly affect the patient's facial esthetics, so you'll need to take this into consideration as well. Of course, if you want to

make any kind of oral appliance for a patient, you'll also have to address occlusion issues.

As you can see from just this example, there is a lot to consider. You don't need to be an expert in all of these areas, however. You just need to be able to integrate all of these concerns into your treatment plan. This will ensure that your treatment of one condition won't exacerbate another.

Orofacial pain, dental sleep medicine, facial esthetics—these issues often are all interconnected. Consider how you treat these frontline cases, as well as when you should refer to other dental specialties and physicians.

Trying everything

Allow me to share a truly fascinating case that my colleague, Rex Whiteman, DDS, a very talented Georgia dentist, recently shared with me. It involves a patient with a 15-year history of temporomandibular joint problems and head and neck pain. In Figure 1, you can see an X-ray of this patient from 2004.

The patient sought relief from several dentists and specialists, who attempted a number of orofacial pain treatments, including appliance therapy and medication. All of these treatments were designed to improve teeth- or joint-related conditions.

However, the patient reported that the pain just kept getting worse, and that she was experiencing a limited range of mandibular motion and crepitus in both temporomandibular joints. Hoping to remedy the situation, she went through surgical and invasive procedures, including bilateral open temporomandibular joint surgery in 2004 and a bilateral condylectomy in 2013 (Figure 2).

When I show these images to other colleagues, dentists like me who graduated in the '80s or earlier make the same comment: "I thought they stopped doing bilateral condylectomies in the 1980s."

These procedures are still performed in extreme cases, however, and the treating doctors felt this patient was just such a case. Based on her history, it seems the doctors were convinced that some sort of condylar degeneration was causing the pain.

So, what happened to her head and neck pain? Did it go away? The answer, unfortunately, is no. But, because the patient had undergone this radical treatment, she thought there was nothing else that could be done, and she resolved to live with the pain.

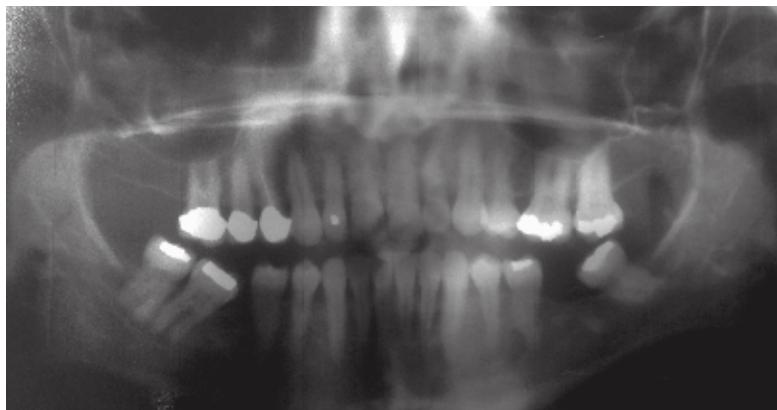


Figure 1. Panoramic radiograph taken in 2004, when the patient had constant orofacial pain.



Figure 2. Panoramic radiograph taken after bilateral condylectomy procedure in 2013. Was this procedure necessary to resolve the patient's pain?

Finding relief

In 2013, the patient in question walked into Dr. Whiteman's office. At that time, her main complaints were ear, neck, shoulder, orofacial, and back pain. She also had limited ability to open her mouth, which was associated with her constant pain.

After reviewing and discussing her medical and treatment history (She was taking tramadol, a centrally acting opioid analgesic for moderate to severe pain.) he evaluated her head and neck muscles and found a number of trigger points that were radiating pain—exactly the pain she had always complained about. In fact, by palpating the trigger points, he could duplicate her pain.

Having been trained in frontline TMD, orofacial pain, and trigger point therapy, Dr. Whiteman discussed treatment options with his patient and suggested nonsurgical, minimally invasive trigger point injections with botulinum toxin (BOTOX®). The patient decided that she had nothing to lose and consented.

The dentist provided the BOTOX therapy, injecting six units into the orbicularis oculi muscles bilaterally, 10 units into the temporalis muscles bilaterally, 12 units into the masseter muscles bilaterally, five units into the splenius capitis muscles bilaterally, and 15 units into the trapezius muscles bilaterally.

The patient noted that she started to feel better while she was still in the office; subsequently, she enjoyed a resolution of approximately 85 to 95 percent of her pain within a week of the treatment. Dr. Whiteman asked if anybody had ever evaluated the muscles in her head and neck as a possible source of her pain, and the patient said she did not recall that occurring. All of the doctors she had seen had only been interested in the teeth, bones, and joints, she said.

Looking back

After her successful treatment, the patient turned to Dr. Whitman and asked the inevitable, but uncomfortable question: "Did I really need all of those surgeries?"

He answered diplomatically, "Listen, at this point I don't know. I wasn't there when you saw those dentists and specialists, and I'm sure that they knew what they were doing. I'm just happy that we were able to help resolve most of your pain, and now we know what to do in the future."

That is exactly how I would have answered this patient's question. We are in no position to judge past treatment decisions, because we don't know how the patient presented to his or her former doctors. However, what we can do with each case that comes before us is learn for the future. This dentist now knows how to resolve this patient's pain going forward, and that is a huge success for the patient. In addition to experiencing pain relief, it is also worth

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noting that she is pleased with the esthetic result of the treatment, specifically the slimmer jaw line that resulted from the masseter injections. As of press time, the patient was no longer experiencing pain, and her symptoms were completely resolved.

After my colleague shared this story with me, I asked to see the entire case file and found that the patient also had a long history of sleep apnea and had been wearing a continuous positive airway pressure (CPAP) machine for some time. This presents some additional questions since we know there is a deep comorbid relationship between bruxism, orofacial pain, and obstructive sleep apnea.

Was the patient's obstructive sleep apnea partially responsible for her orofacial pain problems? If so, to what degree? Some CPAP masks can put a tremendous amount of pressure on facial muscles, which could worsen existing orofacial pain. If this patient received the wrong kind of bruxism appliance—for example, a flat plane appliance that could make her muscular pain worse, not better—how much did that exacerbate her orofacial pain? If this patient's doctors would have taken all of these factors into consideration when developing her treatment plans, would she have resolved her pain years earlier? We will never know. What we do know is that dentists are able to successfully treat these types of patients with the appropriate training in frontline dental sleep medicine, bruxism, and orofacial pain therapy.

Today, we understand more about facial esthetics, orofacial pain, dental sleep medicine, and bruxism appliance therapy than ever before. It is time to start putting all of this knowledge together in order to better serve our patients. Only when we consider every potential consideration in evaluating our patients can we truly provide them with an integrative frontline treatment plan that really works. ♦



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