

First Steps First

Taking a Minimally Invasive Approach to Treating TMJ and Orofacial Pain

General dentists often are the source of referrals to many dental specialties. Referrals from general dentists for care in the areas of orthodontics, periodontics, pedodontics, oral surgery, and endodontics are typically straightforward. There is one area in which many general dentists and specialists struggle about whether or not to refer, however, and that is in those cases of temporomandibular joint dysfunction (TMJ) and orofacial pain.

This is not the place or the article to get into the controversy about "orofacial pain specialists." There are dentists who have been specifically trained in this area through residencies at a small number of dental universities. To date, however, this is not a recognized dental specialty.

Considering how few of these dentists there are in relation to the number of TMJ and orofacial pain patients, it is essential for every practicing general dentist to learn the basics of TMJ and orofacial pain evaluation, diagnosis, and treatment. This interfaces directly into facial esthetics treatment because of the wide therapeutic use of botulinum toxin (BOTOX®/Xeomin®) in these types of cases.

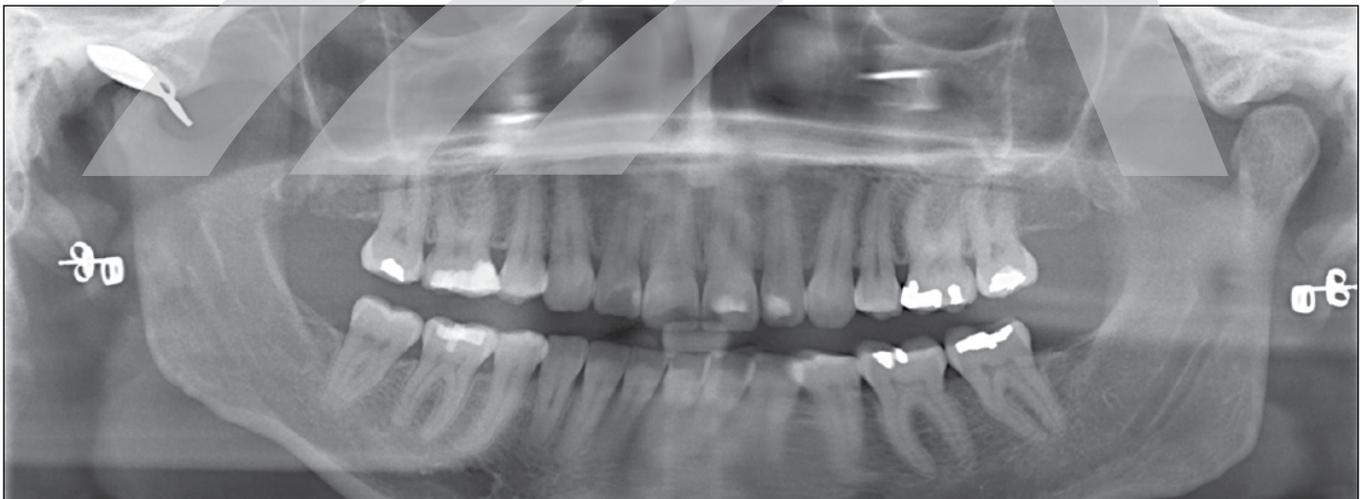
Starting with simple treatment

Evaluation of every TMJ and orofacial pain patient should begin with a complete

medical and dental history and complaint and pain history, followed by a complete dental examination and a thorough head and neck evaluation, including all relevant muscles. Like with every health history survey and examination, each detail can be vitally important. Once this is accomplished, a diagnosis needs to be established. The examination will direct your treatment plan.

My philosophy of treatment always has been to start with the most minimally invasive treatment possible, evaluate if and how much pain relief it has provided, and then build on that treatment plan, depending on the results. As an example of this philosophy, I have heard Henry A. Gremillion, DDS, MAGD, the dean of the Louisiana State University School of Dentistry and renowned orofacial pain expert, speak on the topic of orofacial pain many times. During his presentations, he shows evidence that up to 85 percent of TMJ/orofacial pain comes from the patient's musculature in the head and neck. It makes sense to me then, as a practicing clinician, to begin with evaluation and treatment of the head and neck muscles before providing any other treatment.

Treating the head and neck muscles that may be causing the pain with trigger point therapy and/or botulinum toxin is minimally invasive and nonsurgical. This should be the first step



A post radiograph of right temporomandibular joint arthroplasty with hemiarthroplasty and metal fossa implant surgery
Photo courtesy of the American Academy of Facial Esthetics

(and based on my personal experience, many times, it is all that a patient needs for relief) of any TMJ/orofacial treatment plan—before any irreversible invasive treatment is done.

Considering irreversible treatments last

A patient recently was referred to me, and she came in with an unfortunate story that I have seen many times before (and I would venture to say most of you have too). She saw a dental practitioner for her orofacial pain. She was hooked up to a number of machines that told the dentist that this patient needed a full-mouth reconstruction, which cost \$28,000. There was never any head and neck examination done, and her muscles were never evaluated prior to treatment. She was told what was needed to solve her problem. As you most likely guessed, \$28,000 later, her orofacial pain was the same and getting worse, not better. I did a muscle examination and performed two trigger point injections with Xeomin in about 5 minutes of treatment time. The patient began feeling relief for the first time in eight years while she was sitting in the chair. This cost her about \$800, which she gladly paid.

This is not an indictment against any occlusal or TMJ philosophy. There are many ways to treat TMJ/orofacial pain that can be successful. I am not knocking the dentistry; it was excellent dentistry. But my question is this: Why would you, as a dental clinician, go with irreversible surgical treatment first without considering the evidence-based philosophy of going to the muscles first to see if they are the source of the pain?

Learning from a Mayo Clinic case report

Let me share with you a case report from an outstanding young dentist, Jared L. Taylor, DMD, who is both a member of the Academy of General Dentistry (AGD) and the American Academy of Facial Esthetics (AAFE):

I recently had a new patient come to my office by a referral from the Mayo Clinic. A 42-year-old female presented to our office with a 25-year history of facial pain. She already had gone through a plethora of treatments to resolve her pain with no success. A dentist in a nearby town had been treating her throughout 23 years for chronic TMJ/orofacial pain with multiple splints (one for daytime and one for nighttime). In conjunction with this, she had an orthodontist make a retainer that allowed for secondary tooth movement with the thought that it would help alleviate her pain symptoms. This treatment did not work at all for this particular patient.

Through the years, this patient's facial pain became so unbearable that according to the patient and her husband, "it significantly changed her function and her quality of life." Not only was she taking ibuprofen constantly, she was taking Flexeril® (a muscle relaxer) and tramadol (an opioid pain reliever) for her constant pain.

As we fast-forward the story, the patient had TMJ surgery in May of 2013. A right temporomandibular joint arthrotomy with hemiarthroplasty and metal fossa implant was performed

by an oral surgeon at the Mayo Clinic in Minnesota (see figure). To the oral surgeon's and the patient's disappointment, the TMJ and orofacial pain did not resolve. She then consulted with two other oral surgeons nationally and one of them wanted to do a bilateral total joint replacement. She was not interested in further surgery so she began to research other options.

After some research, she found my name on a referral site from the Mayo Clinic for treating craniofacial pain. This case was very intimidating at first as I felt that the small amount of knowledge I have as a practicing dentist (for only five years) didn't even compare to all the general dentists and specialists that she had combined (75-plus years). After I did the initial head and neck examination, I felt confident that I could treat her and get predictable results.

Her head and neck examination revealed trigger points in the following muscles—the right temporalis, the right and left trapezius, and the right and left splenius capitis. Muscle myalgia was found in the left and right superficial and deep masseters and the left temporalis.

Her treatment plan consisted of Xeomin diluted to 2.5 mL/100-unit vial and the placement of 16 units each in the right and left superficial masseters, 8 units each in the right and left deep masseters, and 12 units in the left temporalis. Trigger point injections with Xeomin were performed with 12 units in the right temporalis, 15 units each in the right and left trapezius, and 12 units each in the right and left splenius capitis.

At the two-week follow-up the patient and her husband were ecstatic! She hadn't felt this great in years! She now is our No. 1 patient, telling everyone what wonderful results she received, advocating for this treatment and bringing her entire family to our practice! Who would have thought that just five years out of dental school, the Mayo Clinic would be referring patients to my office?!"

Let's be honest—most of us are afraid to see TMJ and orofacial pain patients. These patients get bounced around from specialist to specialist who try complicated therapies first with little or no benefit, so why would we want to even touch them?

Get trained in minimally invasive, nonsurgical treatment so that you will have the confidence to examine and perform trigger point injections properly with lidocaine or botulinum toxin. You will be amazed at the therapeutic outcomes these patients can have with simple treatments that you can perform once you are properly trained.

Instead of only referring patients out, start getting referrals from other health professionals, whether physicians or dentists (maybe even from the Mayo Clinic), and be known as the central address for helping orofacial pain patients in your community. ♦



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