

Evidence in Action

My Patient Has Facial Pain—What Can I Do to Help?

By Tammi Clark, DC, and Robert Vining, DC

The Patient

Your patient, a 42-year-old woman, presents to your office complaining of intermittent but severe unilateral facial pain. She describes her pain as “lightning flashes” that follow a path from her right ear to the chin. She first noticed the pain one week prior while brushing her teeth. The painful episodes are becoming more frequent and severe, particularly when chewing, talking, yawning, or brushing her teeth. Her current health history includes infertility treatment and is otherwise unremarkable.

Sixteen years ago, your patient was treated for trigeminal neuralgia (TN). At that time, she sought care from a neurologist who prescribed Tegretol (carbamazepine) and her symptoms fully resolved. Until now, she has not experienced a recurrence. Prior to seeking your advice, she consulted with her infertility specialist who advised against taking Tegretol while pursuing an active infertility program. Your patient informs you that she does not want to stop the infertility treatment and asks if chiropractic care can help reduce her pain.

The Examination

Vital signs are within normal limits. Ears, nose, sinus, mouth, and temporomandibular joint (TMJ) evaluation fails to reveal any significant abnormalities or tenderness. Upper- and lower-extremity sensory, motor, and reflex evaluation is unremarkable. Light palpation along the angle of the right mandible triggers a brief “shooting pain” to the chin and there is significant hypertonicity of the suboccipital and upper-cervical paraspinal musculature, particularly on the right side. Decreased segmental motion in the occiput and upper-cervical region is noted.

The Condition

Potential sources of facial pain are many and appropriate management depends on identification of the cause of the complaint. Facial pain may have a neurologic origin, such as trigeminal or glossopharyngeal neuralgia, multiple sclerosis, or shingles. It may also be associated with various disorders of the teeth, TMJ, sinus, or musculoskeletal structures.¹

Based on your evaluation, you suspect this patient is experiencing a recurrence of trigeminal neuralgia. Because of the musculoskeletal findings (joint restriction, paraspinal hypertonicity), should you assume that chiropractic care has the potential to help this patient? You may wonder if this is wishful thinking or if there is evidence to support this thought.

Where do you go to find evidence?

PubMed is an excellent online resource for health care providers and a great place to search for articles evaluating chiropractic care of trigeminal neuralgia. Searching with the key words, trigeminal neuralgia AND chiropractic, or with trigeminal neuralgia AND manual therapy, you will find two case reports, one by Rodine² and another by Grgic.³ Both reports describe successful management of TN with soft-tissue therapy, mobilization, and manipulation in the cervical area. However, these PubMed searches don't reveal articles describing case series, clinical studies, or literature reviews on chiropractic treatment and TN. Perhaps treatment guidelines are available as another potential source of information.

Using the search words, trigeminal neuralgia AND guidelines, you can easily find several articles. Van Kleef, in a 2009 article, states that the highest incidence of classic TN occurs in the

50- to 70-year age group and recommends MRI evaluation for all patients to exclude tumor and multiple sclerosis (MS) causes.⁴ The 2008 European Federation of Neurological Societies guidelines state that younger age is significantly associated with increased risk for secondary TN (caused by tumor or MS).⁵ Given these recommendations and your patient's relatively young age, it will be important to carefully monitor her neurological status and consider advanced imaging or referral. These guidelines also provide information on standard pharmacological and surgical management of TN, which can assist you in informing and advising her about the available options.

Can you use these articles to help make a more informed decision?

Case reports are a form of evidence. However, they represent a low level of scientific evidence and thus a potentially fragile foundation on which to base your care. Clinical trials, systematic reviews, and meta-analyses contribute higher levels of evidence. It would be presumptuous to assume your results will match those of these two case reports because results shown in one or two people are not necessarily transferrable to others. Nevertheless, the information contained in them may be worthwhile and you may decide to carefully read on. The aforementioned guidelines do not address the question of chiropractic care in the management of TN. It appears that few or no clinical trials exist on the topic. That doesn't mean chiropractic care cannot provide another treatment option; all it means is that little or no research has been performed. Nevertheless, these guidelines can be a valuable resource for current diagnostic, testing, and management information. By understanding these articles, you can better diagnose and advise your patient.

A closer look at critical appraisal

Case reports appearing in peer-reviewed scientific journals are designed to communicate unique clinical situations (e.g., clinical presentations, responses to care, anomalous

findings) involving a single patient. They often describe something about which little has been published. Most case reports evolve from clinical settings, where the environment is not standardized, data are not systematically collected, and where no comparisons with other treatments or patients occur. Far from being unimportant, case reports can provide information on many conditions. They represent a first step in reporting and describing conditions that often need further study.

Are the findings applicable to your patient?

When extrapolating information from case reports, you should ask some questions. Are the patient characteristics identical to your situation? Is the treatment described well enough for you to replicate, or is it only generally outlined? Is it possible that key elements of the case are unreported? Usually these questions cannot be definitively answered. Even if they can, is it reasonable to assume the results from one case will transfer to others in a reliable manner?

What is your decision?

Though the case reports were valuable, you realize that there is little literature-based evidence to support or exclude chiropractic as a treatment option for this patient. Based on your examination findings, clinical experience and patient's goals and wishes, you may decide that a limited trial of chiropractic care is safe and a worthwhile recommendation. Because of the knowledge gained from your evidence search, you will be better able to evaluate and diagnose TN, monitor progress, provide advice, and communicate with other providers about this painful condition.

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