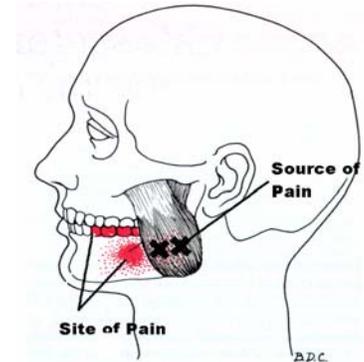




Myofascial Pain and Dysfunction: What is it?

Myofascial Pain and dysfunction is a condition of the skeletal muscles characterized by focal areas of tenderness call **trigger points (TP'S)**. When active, these TP's can refer pain to structures remote from the muscle that harbors them. When the **site** of pain differs from the **source** of the pain, it is called **referred pain**. In the facial region, pain referral may mislead a diagnosing clinician, for example, trigger points in the masseter muscle can lead to the perception of tooth ache (see diagram).



Consequently, root canal therapy to correct tooth pain will be unsuccessful and frustrating for both the clinician and patient.

How do Trigger points develop? Trigger points develop in response to functional demands that exceed the adaptive limits of the muscle. This may occur because of excessive activity, for example trying to lift an object that is too heavy, or a normal activity attempted by a muscle group that is extremely de-conditioned or weakened. In the facial region, this functional overload is typically related to **grinding or clenching your teeth** excessively during sleep. These activities are often stimulated by discrepancies between the functional position of the jaw joint (temporomandibular joint/TMJ) and the way the teeth fit together – collectively referred to as a **malocclusion**. Additional factors related to the development and perpetuation of trigger points include: stress, poor nutrition, other disease conditions (such as Rheumatoid arthritis, metabolic disorders, viral infections).

Diagnosis | Trigger points are found by palpating the muscles of the face and neck. When encountered they feel like pea sized knots that when compressed or plucked produce or exacerbate your pain.

Treatment | Treatment of Myofascial Pain and Dysfunction consists of several levels. The first is to eliminate **initiating or perpetuating factors** that have helped create the problem. This may involve eliminating a malocclusion (utilizing bite appliances), changing the ergonomics of the work environment, cessation of noxious habits (such as chewing gum) or correction of nutritional deficiencies. The second phase involves eliminating the trigger points with home physical therapy exercises called **ice and stretch**. Trigger points that don't respond to the above treatment are injected with local anesthetic and occasionally steroids to cause a local degradation of the muscles that subsequently rebuild without new trigger points.

Post Trigger Point Injection | Instructions

Trigger point injections with local anesthetic may result in one or all of the following:

- **Temporary Numbness** in the area of injection
- **Temporary Paralysis** (for up to 40 minutes) of the muscles of facial expression
- **A Temporary Hematoma** (local swelling due to arterial blood trapped by soft tissue)

Since all of these conditions are temporary, they should not be viewed with any great concern. The sites of injection are typically sore and bruised for 4-7 days following the injections. To control any discomfort, you may take 400mg of ibuprofen, four times a day.

IMPORTANT

To prevent the trigger points from reforming, ice and stretch exercises must be performed at home for 6-8 weeks following the injections (*see Ice and Stretch Instructions*).



Recurrence

It's possible for trigger points to recur for any of the following reasons:

- Incomplete control/ elimination of one or more of the perpetuating factors.
- Failure to continue ice and stretch exercises after trigger point injections.
- Not injecting or treating all trigger points in the both agonist and antagonistic muscles that can refer to the site of pain.