

THE
HEALTH
FORMULA

The Health Formula's
TMJ Self-Help Guide



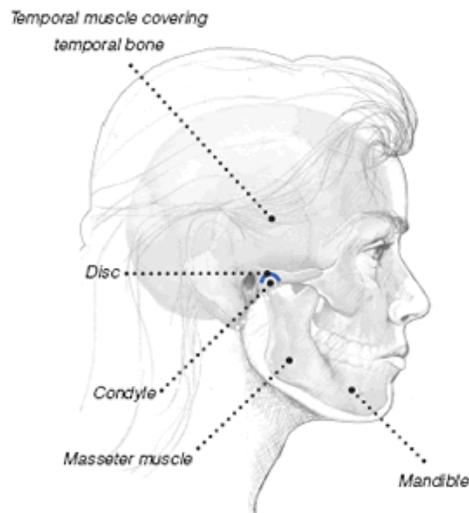
Your Personal Guide to TMJ Treatment

To get the most out of your consultation with a TMJ specialist, it is important to educate yourself to be able to ask questions, and make knowledgeable decisions. We have compiled this document to help you better understand the complex nature of TMD and associated symptoms.

The Basics of the Jaw Joint

What is the Temporomandibular Joint?

The Temporomandibular (TM) Joint is the jaw joint. You have two TM joints which work together as a pair, one in front of each ear. The joints connect the lower jaw bone (the mandible) to the temporal bones of the skull on each side of the head. The muscles controlling the joints are attached to the mandible and allow the jaw to move in three directions: up and down, side to side, and forward and back.



When you open your mouth, the rounded upper ends of the mandible on each side of the jaw (the condyles) glide along the joint socket at the base of the skull. They slide back to their original position when you close your mouth. To keep this motion working smoothly, a soft tissue disc lies between the condyle and the socket. The disc absorbs the shock to the joint from chewing and other movements. The combination of synchronised as well as three-dimensional movements of the paired joints distinguishes them as the most complicated joints in the body. They also differ in biological composition from other weight-bearing joints, like the hip or knee.

What are Temporomandibular Joint Disorders (TMJ or TMD)?

Temporomandibular Disorders (TMD) are a complex set of conditions characterised by pain in the jaw joint and surrounding tissues, and limitation in jaw movements. Injuries and other conditions that routinely affect other joints in the body, such as arthritis, also affect the Temporomandibular Joint. One or both joints may be involved and, depending on the severity, can affect a person's ability to speak, chew, swallow, make facial expressions, and even breathe. Also included under the heading of TMD are disorders involving the jaw muscles. These may accompany the jaw joint problems or occur independently.

Associations with Other Conditions

Scientists have found that most patients with TMD also experience painful conditions in other parts of the body. These associated conditions include chronic fatigue syndrome, chronic headache, endometriosis, fibromyalgia, interstitial cystitis, irritable bowel syndrome, low back pain, sleep disorders, and vulvodynia. These associated symptoms tend to occur more exclusively in women.

Who is affected?

Approximately 12% of the population are affected by TMD at any given time. While both men and women experience these disorders, the majority of those seeking treatment are women in their childbearing years. The ratio of women to men increases with the severity of symptoms, approaching nine women for every one man with major limitations in jaw movements and chronic, unrelenting pain.

What Causes TMD?

Adding to the complexity of TMD is that there can be multiple causes — as well as cases where no obvious cause can be found. Some known causes are the following:

- Autoimmune diseases (in which the body's immune cells attack healthy tissue)
- Infections
- Injuries to the jaw area
- Dental procedures (even prolonged mouth opening)
- Insertion of a breathing tube before surgery
- Various forms of arthritis
- Trauma (direct and repetitive strain)

For many people with temporomandibular joint disorders, the cause is unknown. Some causes given for this condition are not well proven. These included:

- A bad bite or orthodontic braces
- Stress and tooth grinding. Many people with TMJ problems do not grind their teeth, and many who have been grinding their teeth for a long time do not have problems with their TMJ joint. For some people, the stress associated with this disorder may be caused by the pain as opposed to being the cause of the problem.

Poor posture can also be an important factor in TMJ symptoms. For example, holding the head forward while looking at a computer all day strains the muscles of the face and neck.

Other factors that might make TMJ symptoms worse are stress, poor diet, and lack of sleep.

Many people end up having "trigger points" -- contracted muscles in your jaw, head, and neck. Trigger points can refer pain to other areas, causing a headache, earache, or toothache. (See below on myo-fascial trigger points)

Other possible causes of TMJ-related symptoms include arthritis, fractures, dislocations, and structural problems present since birth.

Many TMJ-related symptoms are caused by the effects of physical stress on the structures around the joint. These structures include:

- Cartilage disk at the joint
- Muscles of the jaw, face, and neck
- Nearby ligaments, blood vessels, and nerves
- Teeth

Additionally, there are genetic, hormonal, and environmental factors that can increase the risk for TMD. Studies have shown that a particular gene variant increases sensitivity to pain, and this variant has been found to be more prevalent among TMD patients than among the population at large. The observation that jaw problems are commonly found in women in the childbearing years has also led to research to determine the role of female sex hormones, particularly oestrogen, in TMD. Environmental factors such as habitual gum chewing or sustained jaw positions, such as resting a phone on your shoulder, may also contribute to TMD. Singers and musicians, such as violinists, may also be susceptible to TMD due to jaw stretching or positioning the head and neck to hold the instrument.

Symptoms of TMJ Disorders

The pain of TM disorders is often described as a dull, aching pain, which comes and goes in the jaw joint and nearby areas. However, some people report no pain but still have problems moving their jaws. Symptoms may include the following:

- pain in the jaw muscles
- pain in the neck and shoulders
- chronic headaches
- jaw muscle stiffness
- limited movement or locking of the jaw
- ear pain, pressure, fullness, ringing in the ears (tinnitus)
- painful clicking, popping or grating in the jaw joint when opening or closing the mouth
- a bite that feels "off"
- dizziness
- vision problems

Keep in mind that occasional clicking or discomfort in the jaw joint or chewing muscles is common and is not always a cause for concern. Often, the problem goes away on its own in several days or a few weeks. If it persists or re-occurs, you should get it assessed by a specialist in TMJ.

Whom Should You See?

The TMJ is a complex area and needs the specialist knowledge of a practitioner who has substantial knowledge in TMJ and TMD. Many claim to be able to treat TMJ, along with every other condition such as ankle sprains, back pain and sports injuries. At The Health Formula, we have a special interest in treating TMJ related disorders. We have the experience required to accurately assess and treat an individual with TMJ disorders. We've successfully treated many patients with significant TMJ disorders

Diagnosis

The American Association for Dental Research recommends that a diagnosis of TMD or related orofacial pain conditions should be based primarily on information obtained from the patient's history and a clinical examination of the head and neck. They may note, for example, whether patients experience pain when mild pressure is applied to the joint itself or to the chewing muscles. The patient's medical history should not be restricted to the dentition (the teeth and their arrangement) or to the head and neck, but instead should be a complete medical record, which may reveal that the patient is also experiencing one or more of the comorbid conditions found to occur frequently in TMD patients. Blood tests are sometimes recommended to rule out possible medical conditions as a cause of the problem. Before undergoing any costly diagnostic test, it is always wise to get an independent opinion from another health care provider of your choice (one who is not associated with your current provider).

As a patient, you should discuss your concerns with your primary care physician to help rule out any other conditions which could be causing symptoms as well as to help get your pain under control, and normal use of your mouth and jaw.

Treatments

Most people with TMD have relatively mild or periodic symptoms, which may improve on their own within weeks with simple home therapy. Self-care practices, such as eating soft foods, applying ice or moist heat, and avoiding extreme jaw movements (such as wide yawning, loud singing, and gum chewing) are helpful in easing symptoms. According to the NIH, because more studies are needed on the safety and effectiveness of most treatments for jaw joint and muscle disorders, experts strongly recommend using the most conservative, reversible treatments possible. Conservative treatments do not invade the tissues of the face, jaw, or joint, or involve surgery. Reversible treatments do not cause permanent changes in the structure or position of the jaw or teeth. Even when TMJ disorders have become persistent, most patients still do not need aggressive types of treatment.

Pain Medications

For many people, short-term use of over-the-counter pain medications or nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, may provide temporary relief from jaw and muscle discomfort. If pain persists, your medical provider can prescribe stronger pain or anti-inflammatory medications, muscle relaxants, or antidepressants that can help ease pain and other symptoms. It's also important to work closely with your primary care physician so that they can monitor the systemic effects of these medications and advise on side effects and drug interactions.

Splints

A dentist may recommend an oral appliance, also called a stabilisation splint or bite guard, which is made of hard acrylic resin and fits over the upper or lower teeth. If a stabilisation splint is recommended, it should be used only for a short time and should not cause permanent changes in the bite. Studies of their effectiveness in providing pain relief, however, have been inconclusive. In some patients, it may encourage clenching and grinding, and therefore, increase the symptoms. If a splint causes or increases pain, stop using it immediately and contact your dentist. Another type of splint, called a mandibular repositioning splint (MORA), is one that is used to move the lower jaw either forward or backward. It is intended to put the jaw into a new position, and therefore, it can cause permanent changes in the bite. It is a more invasive form of splint treatment. This is a concept that has long been refuted and has no scientific validity.

Other Treatments

Beware of some procedures that are irreversible, have not been proven effective for treating TMD, and may make your problem worse. These include the following:

- orthodontics treatment to change the bite
- crown and bridge work
- grinding down teeth (occlusal adjustment)
- mandibular repositioning splint (MORA)
- injections such as Botox, hyaluronan,
- steroid injections

TMJ Surgery

Surgical treatments are controversial and should be avoided if possible. There have been no long-term clinical trials to study the safety and effectiveness of surgical treatments for TMD, nor are there criteria to identify people who would most likely benefit from surgery. Failure to respond to conservative treatments, for example, does not automatically mean that more aggressive treatments, such as surgery are necessary. If you have had prior joint surgery, remember that another surgical procedure is not always the answer to the problem.

TMJ Implants

Replacement of the temporomandibular joint with an artificial implant should only be considered as a last resort. When used in patients who have had multiple prior jaw surgeries, it may improve function, but studies have shown that it generally does not significantly reduce pain. Before undergoing such surgery on the jaw joint, it is extremely important to get other independent opinions and to fully understand the potential benefits and significant risks.

Nutritional Health

TMD alone can lead to poor nutrition if jaw pain and oral disability seriously affect your diet. In addition, TMD patients may experience dry mouth as a side effect of chronic pain medications and other drugs. The lack of saliva to bathe the oral tissues increases the risk for dental cavities, yeast infections, and broken teeth and adds to the difficulties in chewing and swallowing. The mouth may also become more sensitive to pain and temperature, and taste may be affected. Speak to your health care provider, or enlist the support of a registered dietitian to help you with your nutritional health.

Research for Solutions

As research advances to understand more about TMD, many in the health care community are reassessing past treatments and ways in which they were developed. As noted earlier, there is a growing consensus of health professionals who consider TMD a

complex family of conditions like hypertension or diabetes. In that regard, the TMD patient should not be seen as someone with an isolated dental or jaw condition but rather viewed as a whole individual subject to genetic, hormonal, environmental and behavioral factors that may be contributing not only to jaw pain and dysfunction, but to a range of other serious conditions. Our practitioners at The Health Formula are trained to assess and treat the person from a holistic approach to ensure that eliminate all the potential causes of your TMJ disorder.

Research to understand why these conditions coexist is in its early stages, but it is already prompting leading investigators to propose a name change. "TMD" is not an apt term to describe the complex multisystem pains and dysfunctions that many patients experience. The thinking now is that these debilitating problems experienced in various parts of the body have their origin in pathology at the highest levels of the brain and central nervous system.

The Health Formula continues to advocate for research for solutions to TMD and the medical conditions that frequently co-occur it, as well as for the development of safe and effective diagnostics and treatments. Our practitioners actively research the cause of TMJ disorders in order to stay up-to-date and provide more effective solutions for our patients.

Basic Self-Management of Jaw Pain

1. Maintain upright, relaxed neck, back and shoulder posture; don't protrude chin (e.g. applying lipstick, at computer or talking) or slump; think tall, especially at work, on phone, exercising.
2. Ensure good work set-up with computer screen directly ahead, eyes at mid-screen, sit back in a supportive chair; avoid prolonged postures and move regularly from sit to stand, walk. Minimise prolonged, tilted and slumped posture when texting or gaming, take regular standing breaks.
3. Be mindful of jaw tension (avoid clenching, grinding) especially when concentrating, trying hard, when frustrated or stressed. Remember to have a few millimetre gap between the teeth at rest.
4. Avoid hard (whole apples, carrots, nuts, pens, fingernails) chewy (lollies, gum, tough meat) or wide (crusty breads, hamburgers, rolls, corn cob) foods, which overwork the sprained jaw with hard or prolonged chewing
5. Cut or grate foods into bite-sized pieces to chew with the back teeth, juice raw fruit and vegies
6. Avoid wide mouth opening as in yawning. Yawn smaller and support the lower jaw in a yawn. Advise dentist or anaesthetist (prior to any procedure) of TMD to reduce jaw sprain with prolonged mouth open
7. Open the jaw in an even hinge or arc motion; practise in front of a mirror to correct asymmetries
8. Try to sleep on your back with a supportive pillow. If you do sleep on your side have good pillow support of the neck and do not sleep on your jaw. Good sleep is essential for well-being and lack of it contributes to chronic pain; discuss sleep deprivation management with your practitioner
9. Minimise or manage stress with relaxation and daily exercise (e.g. 40 mins of walking daily). Counselling can give strategies to enhance well-being, as the mind and body work together
10. Discuss with your dental clinician appliances to rest the sprained jaw and protect teeth
11. Apply moist moderate warmth to the facial and temporal muscles (ensure it does not burn)
12. Follow a program of massage and exercises to loosen and strengthen the jaw as directed by your practitioner.

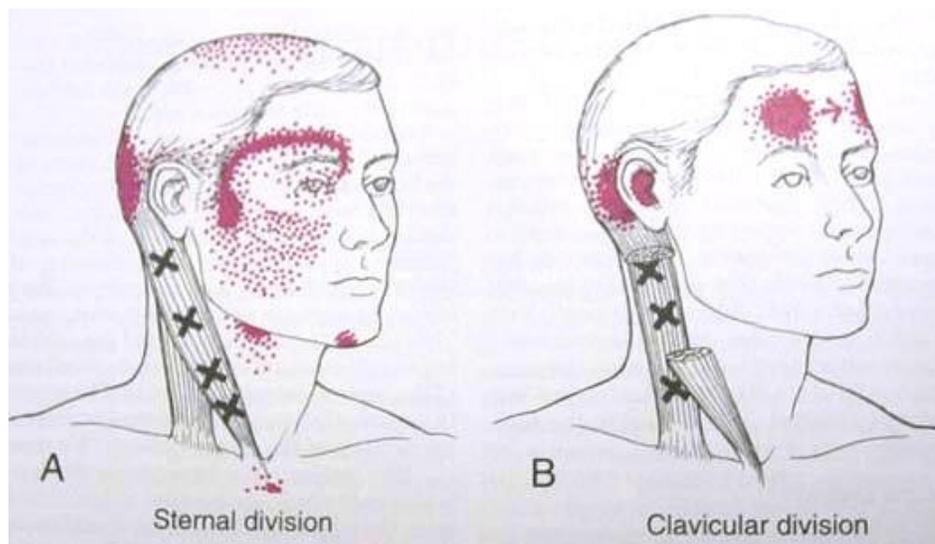
Myo-Fascial Trigger Points

Your muscles around your head and neck play a significant part in your TMJ disorder, and the accurate diagnosis of which muscles are a problem in your particular case is essential. As you can see from the diagrams below particular muscles can cause pain and dysfunction distant to the muscle. Being able to identify and treat these muscles is essential to your recover from TMJ. Sometime a single treatment the correct muscle can provide dramatic relief even to those long standing conditions.

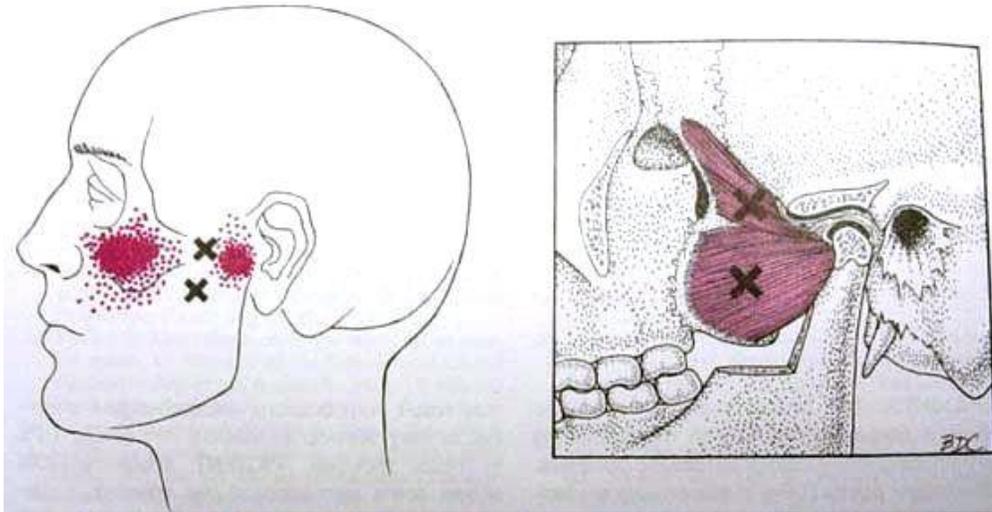
Below you will find pictures of common trigger points which refer pain around the head. Trigger points are tight bands within your muscles, a bit like a knot. These tight bands restrict blood supply and send of erratic nerve signals that contribute to your pain.

Treating the trigger points is essential in resolving your TMJ dysfunction. Our therapists are trained to accurately locate and treat the precise trigger points around your head and neck that may be contributing to your TMJ dysfunction.

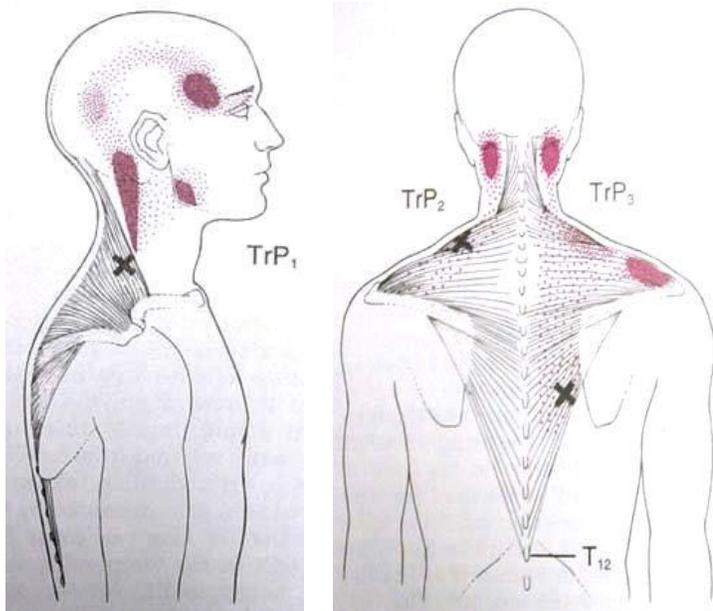
Sternocleidomastoid Trigger Points



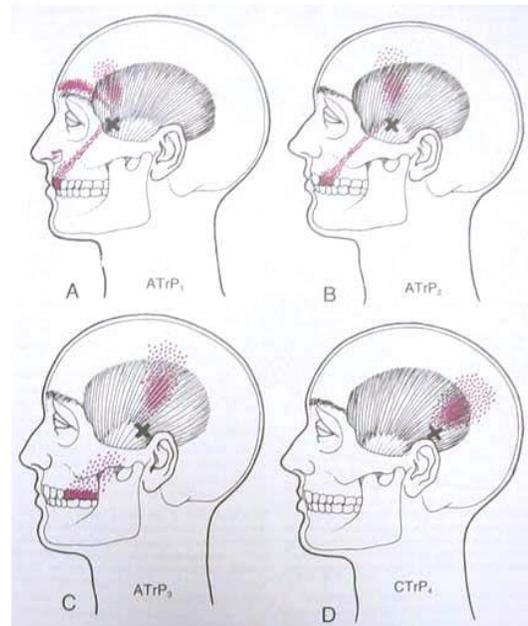
Lateral Pterygoid Triggers



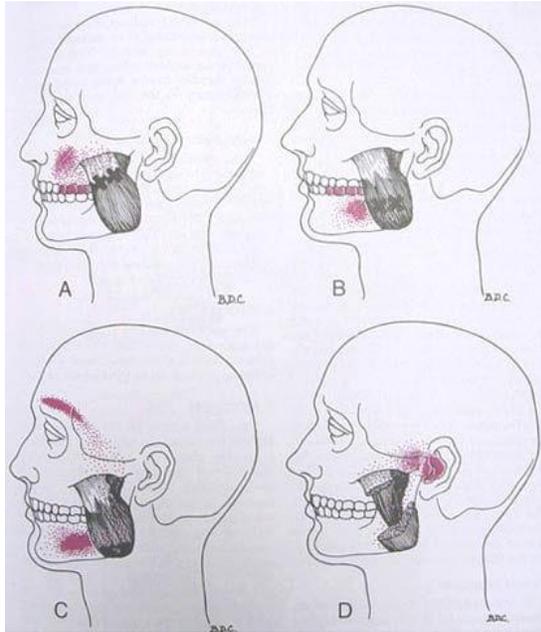
Trapezius Trigger Points



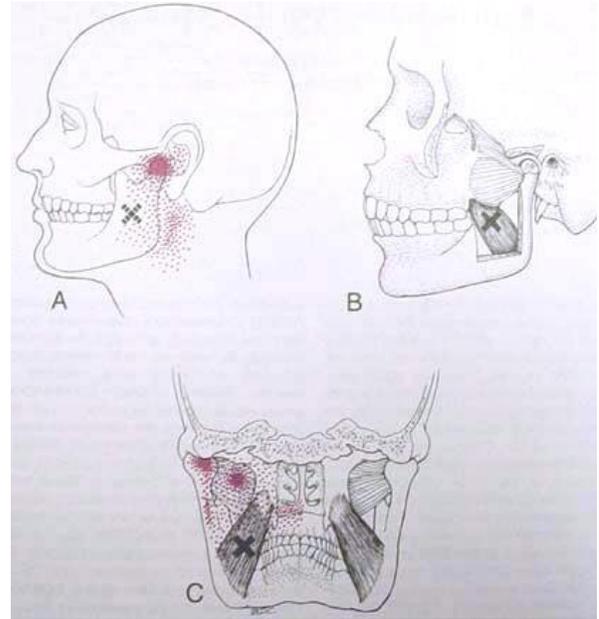
Temporalis Trigger Points



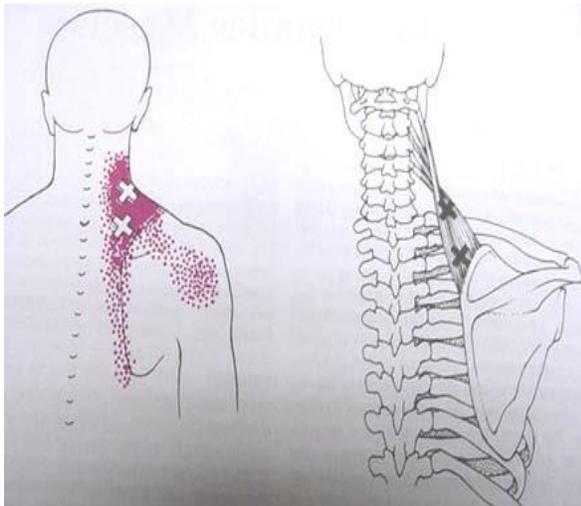
Masseter Trigger Points



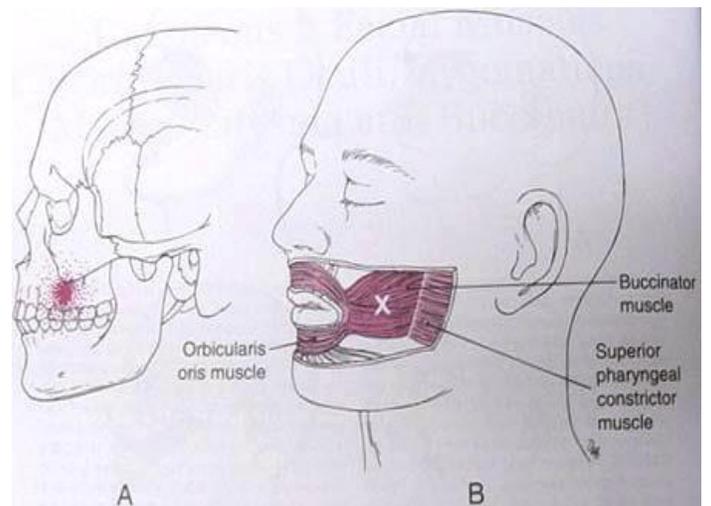
Medial Pterygoid Trigger Points



Levator Scapulae Points



Buccinator Trigger Points



Outlook (Prognosis)

For many people, symptoms occur only sometimes and do not last long. For others that we do see, they may have significant pain, inability to open their mouths to eat, to laugh, or to yawn. In all cases it is essential to see a specialist in TMJ who has the experience and knowledge to be able to treat the jaw quickly and effectively. Many of our clients have wasted thousands of dollars on treatment that was unnecessary and in-effective. We provide a comprehensive, non-invasive, treatment for TMJ disorders, and most importantly we educate and advise our clients on the causes, how to prevent it from re-occurring and self-management options. We understand that TMJ disorders can be particularly distressing from clients, who find that even the simplest activities of eating and laughing and extremely painful.

Mouth splints are a common treatment approach for teeth grinding. While some splints may silence the grinding by providing a flat, even surface, they may not be as effective at reducing pain or stopping clenching. Splints may be effective in the short-term but could become less effective over time. Some splints can also cause changes in your bite. This may cause a new problem.

Possible Complications

- Chronic face pain
- Chronic headaches

We recommend that if you are searching for an answer to your TMJ disorder that you get it assessed before it leads to other possible complications. We know that many of these cases are simple to correct and for many people the delay in effective treatment does complicate matters.

When to Contact a TMJ specialist

See your health care provider right away if you are having trouble eating or opening your mouth. Keep in mind that a wide variety of possible conditions can cause TMJ symptoms, from arthritis to whiplash injuries. Experts who are specially trained in TMJ disorder and jaw pain can help diagnose and treat TMJ.

Educate Yourself – Questions You Should Ask Your Practitioner

1. What is the purpose of the proposed treatment, and why is it necessary in my case?
2. Is the treatment reversible, or is it irreversible?
3. Will this treatment reduce my pain?
4. What side effects or complications may I experience, and what should be done about them?
5. What other treatments are available?
6. What are the advantages of the proposed treatments rather than other forms of therapy with respect to benefits and risks?
7. How many follow-up treatments will be necessary?
8. What are your qualifications and experience in treating TMJ disorder?

Conclusions

Your health care provider should answer these questions in words you can understand. If you don't understand any part of the discussion with your health care professional, it is important to ask that it be explained again. If your provider will not or cannot answer these questions, find one who will. You must be your own health care advocate.

TMJ Self Test

If you answer yes to any of the following questions you may have TMJ disorder or similar condition.

- Jaw pain YES/NO
- Jaw clicking YES/NO
- Neck and/or upper shoulder muscle pain YES/NO
- Dizziness YES/NO
- Ringing in the ear YES/NO
- Face pain, headache, migraine YES/NO
- Limited movement of the jaw YES/NO
- Altered jaw movements YES/NO
- Jaw locking or stiffness YES/NO

We trust that you have found this information informative and will help you to make an informed choice about how to resolve your TMJ disorder. At The Health Formula, we pride ourselves on being able to help even the most difficult cases of TMJ. Our primary goal is to get people better as quickly as possible and ensure that the problems does not return.

To make an appointment, please call (03) 9088 2010 or book online at www.thehealthformula.com.au

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