



Countless Australian's have TMD. Simply put, TMD is the syndrome that happens when the muscles in the jaw and the temporomandibular joint are out of alignment or misaligned, causing problems when chewing. In plain English, the ligaments, muscles, bones and joints do not line up, causing pain and long term damage to the jaw joint and the teeth.

# Some Symptoms Associated with TMD:

- a clicking, popping or grating sound when opening or closing the mouth
- headaches and/or dizziness
- tenderness in the jaw muscles
- earache
- jaws that sometimes lock open when yawning or if mouth is held open
- spasm or cramps in the jaw area (very common)
- locking of the jaw

# What Causes TMD?

- injury or accidents
- developmental (natural) defects, including the wearing-down of teeth or fillings causing a malalignment of the teeth
- surgery
- orthodontics
- stress that causes clenching of the jaws and grinding of the teeth naturally misaligned teeth

# What are the long term consequences of TMD?

- permanent damage to the jaw joint requiring high risk surgery.
- permanent pain that is difficult to manage.
- damage and wear to the teeth.
- constant headaches, neck pain, dizziness and ringing in the ears.
- altered lifestyle choices because of pain.
- locked jaw.

# How can you diagnose TMD?

TMD can be detected or suspected through symptoms and tooth wear, however it requires i-CAT scanning and neuromuscular testing to diagnose the cause and to plan the appropriate treatment. Neuromuscular testing involves:

- JVA joint vibration analysis to detect movement and vibration in the jaw joint.
- JT jaw tracking to assess the sideways movement of the jaw during opening and closing.
- EMG electromyography to determine the activity of the jaw, face and neck muscles.

• TENS – to relax the muscles and allow the jaw joint to find a 'happy position'. From this, a bite registration can be taken and an occlusal splint made to assist your jaw and muscles to fall into the natural position alleviating stress and misalignment in the tempormandibular joint.

### What Can be Done to Correct TMD?

If the temporomandibular area has been damaged by arthritis or as a result of an accident, surgery may be needed to correct the TMD and re-establish the proper occlusion. This surgery is high risk and generally has a low success rate.

Far more likely, your doctor will recommend a therapy that may include an occlusal orthotic and specific exercises to keep the teeth from touching and to allow the joint to remain lined up, allowing the jaw's hinge area to relax. Such therapy increases your comfort by diminishing the TMD pain. If an orthotic is prescribed for you, it is very important that you follow your dentist's instructions regarding the amount of time and time of day you must wear it.

If your condition is temporomandibular joint dysfunction (TMD), you need to wear your orthotic all the time unless directed otherwise. Do not remove the orthotic when you eat, as this would compromise your treatment and diminish its effect. The orthotic stops tooth-to-tooth contact and keeps your jaw lined up properly, allowing the muscles and joint area to heal. As this healing takes place and the symptoms gradually reduce, your dentist will adjust your orthotic to keep your teeth properly aligned. The long term treatment options will vary depending on the severity of the condition. They may range from continual orthotic usage to orthodontics, to full mouth rehabilitation using crown build ups.

It is important to be aware that TMD is not always curable. Certain treatments may minimize or reduce the symptoms, however in more advance cases, the damage is often irreversible. Early detection and treatment is the best 'cure'.

### Grinding ("bruxism") and Clenching:

This is a contributing factor to TMD and may be the beginning of more permanent damage to the teeth and jaw joint. If you are a grinder, your dentist will prescribe an orthotic for you to use while you are asleep or during periods of stress. The orthotic will assist in protecting your jaw joint and your teeth from the damage caused by grinding.

The orthotic alone may not be sufficient to prevent more permanent damage, however it is a good start. Regular preventive care appointments will allow your dentist to monitor your TMD progression and recommend any further diagnosis or treatment as necessary.

Remember, left untreated, TMD will cause permanent damage and long term pain.