# **Temporomandibular Joint Dysfunction (TMJ)**



## What is the Temporomandibular Joint?

The temporomandibular joint (TMJ) is located in front of each of your ears, where your skull and lower jaw meet. It allows your lower jaw (mandible) to move.

The TMJ is a hinge and gliding joint and is the most constantly used joint in the body. The round upper end of the lower jaw, or the movable portion of the joint, is called the condyle; the socket is called the auricular fossa. Between the condyle and the fossa is a disk made of cartilage which acts as a cushion to absorb stress and allow the condyle to move easily when the mouth opens and closes.

If this joint doesn't work effectively, it is called TMJ Dysfunction.

### What are the symptoms TMJ dysfunction?

TMJ dysfunction is quite common and has a variety of symptoms, including earache, headache and difficulty opening your mouth. You may also notice clicking or grating sounds in the joint and may feel pain when opening and closing your mouth.

### What are the causes TMJ dysfunction?

The causes of TMJ are varied. Arthritis is one cause, grinding or clenching teeth (Bruxism), or uneven teeth are others. Sometimes it is the result of an injury or displacement or dislocation of the disk between the jawbone and the socket. A displaced or dislocated disk may produce clicking or popping sounds, limit your jaw movement and cause pain when you open and close your mouth.

The disk can also develop a hole (perforation), which can produce a grating sound when the joint moves. There are also conditions such as trauma (a broken bone or jaw injury) or rheumatoid arthritis which can cause part of the TMJ to fuse, preventing jaw movement altogether.

#### What can I do to help improve the dysfunction and ease the pain?

There are several things you can do to improve the function of your TMJ and ease pain.

- Massaging the affected muscles
- Avoiding foods that are hard to chew
- Doing exercises to relax your jaw and face (see below)
- Practicing good posture
- Using Hot or cold packs on your TMJ
- Visiting your Dentist regularly
- Never bite your fingernails
- Never bite your lower lip
- Avoid biting on your front teeth

- Keep your upper and lower teeth apart when at rest
- Avoid wide yawning
- Don't chew gum or pencils
- Take simple painkillers such as Paracetamol or Ibuprofen

Sometimes you will be prescribed an anti-inflammatory medication (such as Ibuprofen) or painkiller (Amitriptyline). In some instances, your Dentist may recommend you wear a mouth guard or splint to prevent tooth grinding or clenching, particularly at night.

## **Exercises for TMJ Dysfunction**

The purpose of these exercises is to prevent clicking of the jaw joint, strengthen the muscles which pull your jaw backwards and alleviate pain.

#### 1. Goldfish - Acute Pain

Touch the tip of your tongue to the roof of your mouth, just behind the front teeth. Slowly open your mouth until you feel your tongue being pulled away. Do not open your mouth any further. Then close your mouth and relax. Repeat 20 times, 4 times daily.

### 2. Palate Sweeps

Keep the teeth about 1cm apart. Run the top of your tongue over the roof of your mouth backwards toward your soft palate as far as it will go, then forwards again. Repeat 20 times/ 4 times a day. Painless joint noise is normal.

#### 3. Yawn Stretch

Bring the front teeth (Incisors) edge to edge. Then open the mouth wide and hold for 3-5 seconds. Repeat 3 times / 5 times a day. Mild, dull stretching discomfort is normal. Discontinue yawn stretches if sharp pain occurs.

#### 4. Tongue Suction with Opening

Create suction with your whole tongue against the whole roof of your mouth and open as wide as you can without losing suction. Hold stretch for 3 seconds without releasing suction. Repeat 10 times, 4 times a day.

#### 5. Tongue Tick Tock Pops

Create suction with your tongue against the roof of your mouth, smile and make a "tic" sound, popping the tongue off the roof of the mouth. Then purse your lips and make a "toc" sound. Repeat 20 times, 4 times a day

You may find your pain is worse for a while at first; this is because you are not used to the movement. Over time this will subside.

After two-three weeks of doing the exercises, you will find your muscles will be retrained and your jaw will open and close smoothly without clicking.