

## **Temporomandibular (Jaw) Joint Problems**

### **What is the temporomandibular joint (TMJ)?**

The TMJ is the joint between the lower jaw and the skull, which is situated just in front of the ear canal. The joint includes a cartilage disc, which separates the jaw from the skull. There are also 4 powerful chewing muscles, which move the jaw when speaking or chewing.

### **What is temporomandibular joint dysfunction (TMD)?**

This is a common group of conditions associated with the chewing system. Problems can affect one or both of jaw joints, chewing muscles and teeth. The symptoms from these conditions vary from person to person.

### **What are the symptoms?**

Common symptoms include:

- Jaw and face pain.
- Jaw joint noise: such as clicking, crunching, grating or popping.
- Earache.
- Headache.
- Limited mouth opening.
- Jaw locking.
- Pain radiating along the cheek bone or down the neck.

Most jaw joint problems are made worse by chewing and at times of stress.

### **Is this condition serious?**

Although the symptoms of TMD can be worrying, most go away again on their own, and typically last a few months. If you have had TMD it does not mean you will get arthritis in your jaw joints.

### **What causes it?**

Temporomandibular dysfunction can be associated with many things including:

- Trauma, for example:
  - A knock to face or jaw
  - Unexpected wide mouth opening - as in very wide yawn
  - Biting down on something hard
- Tooth grinding (bruxism) and tooth clenching, often at night.
- Stress
- Nail biting

- Uneven bite or altered chewing pattern to avoid a sore tooth
- Sometimes no obvious cause can be found but symptoms may be associated with other stress related disorders such as tension, headaches, low back pain and abdominal pain

### **What is happening to cause the symptoms?**

- Pain can be caused by the muscles in and around the joint tightening up and also causing limited mouth opening.
- Joint noise occurs if the cartilage disc is stretched out of its normal position and moves abnormally during jaw movements.
- The noise sounds louder to the patient as the joint is just in front of the ear.
- Occasionally the cartilage disc can slip forward in the joint and not return to its normal position causing locking of the joint and limited mouth opening.

### **What are the treatments?**

Most TMD will improve spontaneously over a few months. Treatments vary depending on whether you are suffering from muscle pain, derangement of the joint itself or a combination of both. Generally treatment is aimed at relaxing the jaw muscles allowing the cartilage disc to return to a normal position.

Effective treatments include:

- Reassurance – Once it has been explained that the condition usually resolves after a period of time, many patients do not seek further treatment.
- A soft diet that requires little chewing, allowing over-worked muscles to rest.
- Painkillers – Anti-inflammatory medication such as Ibuprofen can reduce both pain and inflammation within the joint.
- Local heat – for example a hot water bottle wrapped in a towel and applied to the side of the face will increase blood flow in the muscles and help them to relax.
- Try to eliminate any habits such as grinding, clenching or chewing fingernails. This may be difficult as some habits are done when asleep or subconsciously when you may not be aware of them.
- Jaw joint and muscle exercises - these are designed to help relax muscles or to encourage a displaced cartilage to resume its normal position. The best ones will have been discussed with you but it is important to carry them out as instructed for them to be effective.
- Resting the jaw as much as possible and avoid yawning wide by supporting the jaw with the palm of the hand.
- Bite raising appliance – these are similar to a sports mouth guard and is worn mainly at night and can help by supporting the joint and surrounding muscles.

- Replace missing teeth to balance the bite or replace worn out dentures.
- Antidepressant therapy – this does not mean that you are depressed but long standing pain can cause this. Like other chronic pain conditions such as migraine it has been found that some antidepressant medication is ideal for the treatment of TMD due to their muscle relaxing and pain killing effects. Importantly they are not addictive.
- Surgery – this is only carried out in a small number of cases. It may involve a steroid injection into the joint, which can be done whilst awake, a manipulation of the joint whilst you are asleep, or a washing-out (arthrocentesis) of the joint. More rarely surgery can be performed with a mini telescope and in extreme cases it may be necessary to open the joint and operate on the bones, cartilages and ligaments.