

Tempromandibular joint (TMJ) problems

What is the tempromandibular joint (TMJ)?

The tempromandibular joint (TMJ) is the jaw joint between the lower jaw (mandible) and the skull (in the temporal bone). There is one on each side of your face, just in front of each ear.

The joint is made up of the two bony parts of each joint, which have a disc of cartilage between them.

Around the joint there are some ligaments holding it in place and some muscles that attached to the bones and the disc, allowing movement of the joint.

What does the TMJ do?

The joint allows and controls the movement of the muscles attached to the lower jaw. This movement is needed for biting, chewing, swallowing, speaking and yawning.

Normally, you can move your jaw up and down, side to side and forward and back. Some of these movements are easier than others and you might need to do them in combination eg to open your mouth wide you need to move your jaw forward first.

What can go wrong with the TMJ?

The TMJ can suffer from the same sorts of disorders and diseases as other joints including problems with the bones, cartilage, muscles or ligaments.

The TMJ can be damaged as a result of accident or it might give out warning symptoms when it is being misused.

Why might I get TMJ problems when I am stressed?

When some people are not responding well to stress they can change the behaviour of their jaws consciously (eg during the day) or unconsciously (eg at night). For example they might tense up their chewing muscles, clench their teeth and even grind their teeth at night. This can cause short-term or long-term problems to the teeth and joint.

Why might the TMJ become subject to wear and tear?

In most people, the TMJ works hard without complaining - it can accommodate changes in the teeth and the way we bite and chew without us getting symptoms.

In other people, changes in the way we use the joint can lead to pain, clicking and crunching sounds. The reasons for (and treatment of) these symptoms include:

- Overworking of the joint eg from excessive opening or grinding.
- Unbalanced occlusion.

Dentists use the word 'occlusion' to describe the way the teeth meet (and bite) together. They can describe a 'perfect occlusion', in which the teeth fit perfectly and don't stress the TMJ.

Few people, however, have a perfect occlusion and yet most do not get TMJ problems.

If your occlusion is thought to contribute to your TMJ symptoms, your dentist will be able to discuss the treatment options with you. For example, an orthodontist can re-align teeth to give a more balanced occlusion - or you might need new dentures constructing.

- Most of us feel anxious and even depressed at some time in our life.

Apart from the effect on our mood and energy levels, we can get other symptoms including headaches, migraine, eczema and TMJ problems.

Treatment of the underlying condition can be sufficient to reduce the TMJ symptoms.

- The TMJ can be affected by any general (systemic) illness that involves the joints, for example arthritis.
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Some patients have TMJ symptoms but we can't find the cause - we call this idiopathic ('don't know').

How will I know if I have TMJ symptoms?

The symptoms of TMJ problems can be very distressing but often are only temporary and can usually be reduced successfully. They include some or all of the following:

- **Pain** that seems to be in the joint itself or that moves out (radiates) to other areas such as the temple region (above and in front of the ear), the cheeks or neck muscles.
- **Restricted opening of the jaw** because of pain in the joint and/or muscles. Dentists and oral and maxillofacial surgeons call this trismus - it is the joint warning you to rest it (a protective mechanism).
- **Clicking within the joint.** This is very common and can occur without any other symptoms. It is caused by a sudden movement of the disc inside the joint - ie it is moving in an uncoordinated way.
- **Grating noise in the joint.** Dentists and oral and maxillofacial surgeons call this crepitus. It describes a prolonged continuous noise when you move your joint. This is less common than having a clicking noise. It is usually due to wear and tear on the joint.
- **Locking of the TMJ.** This occurs because of a (temporary) displacement of the disc, which prevents normal movement of the lower jaw. Usually this can be prevented by avoiding excessive movement.

What can be done for TMJ symptoms?

TMJ disorders have many and various causes, some of which will decrease over time on their own.

It is useful to know what is causing the TMJ symptoms and especially to make sure that they are not signs of other (more treatable or more serious) conditions.

Often the symptoms will be temporary and/or can be treated and prevented by following simple advice including:

- Taking only a soft diet that doesn't require too much chewing (at least until the symptoms have passed).

- Avoiding opening your mouth too wide.

For example, when yawning try putting your hand under your chin to stop yourself opening too wide. Try cutting up fruit (eg apples) into pieces rather than biting off big chunks.

- Avoid habits that can stress your TMJ such as chewing gum, biting pen/ or pencil tops or biting your nails.

- Use simple pain killers as required.

Your dentist, doctor or oral and maxillofacial surgeon might prescribe some pain control for you. Ibuprofen (eg NeurofenTM) is one of the best types of analgesic for TMJ symptoms - but, as for all pain control, do not take it if you have been advised against it (eg by your doctor).

- Jaw exercises can be helpful.

Your dentist or oral and maxillofacial surgeon might have shown you some - practise them regularly to train your joints and muscles.

- Placing a warm towel over the painful area often helps relieve the pain.

- Using a special splint on your upper or lower teeth to prevent grinding and clenching.

Your dentist can make this for you to wear (usually at night).

- Treating the cause of your anxiety.

Some doctors will prescribe a type of anti-depressant for TMJ pain - these can reduce muscular tension and therefore TMJ pain.

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- Physiotherapists, as advised by your oral and maxillofacial surgeon can help some types of TMJ symptoms.
 - In a very small number cases, surgery on the joint by an oral and maxillofacial surgeon is a treatment of TMJ symptoms. This is usually only after trying the other measures.

As with other joint problems, TMJ disorders can be chronic in spite of treatment and taking steps to prevent it.

Sometimes, the patient will need to learn to live with some limitation of function - often this will only be from time to time.