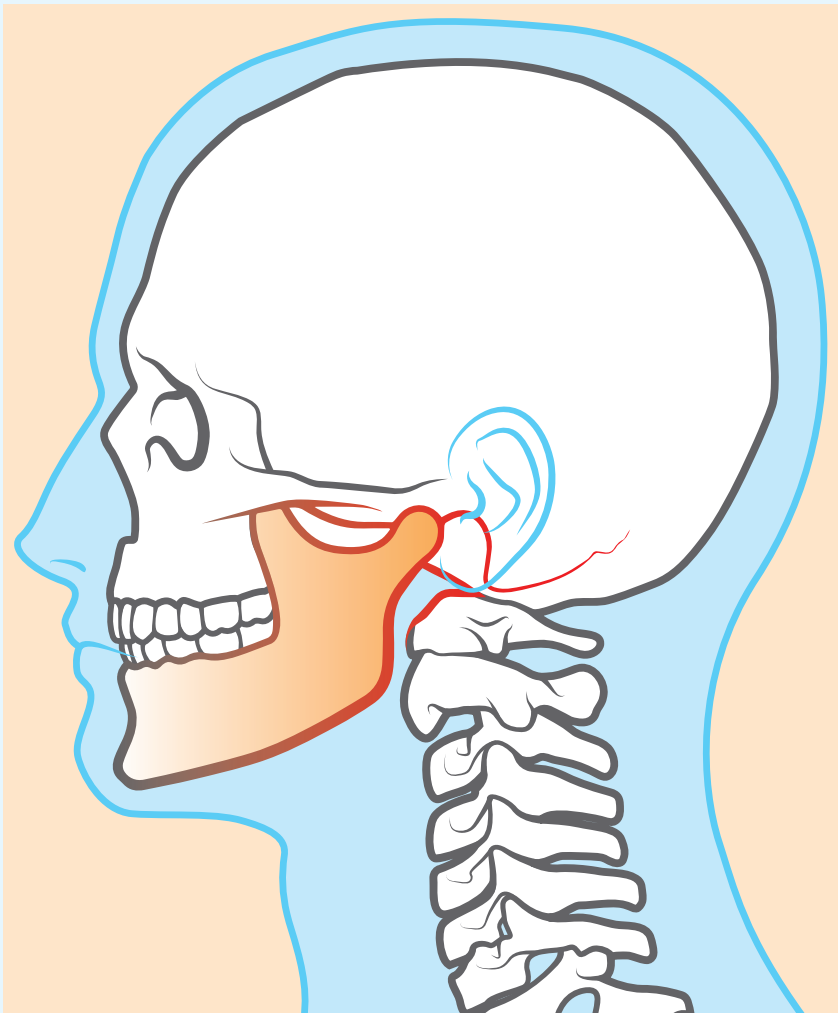
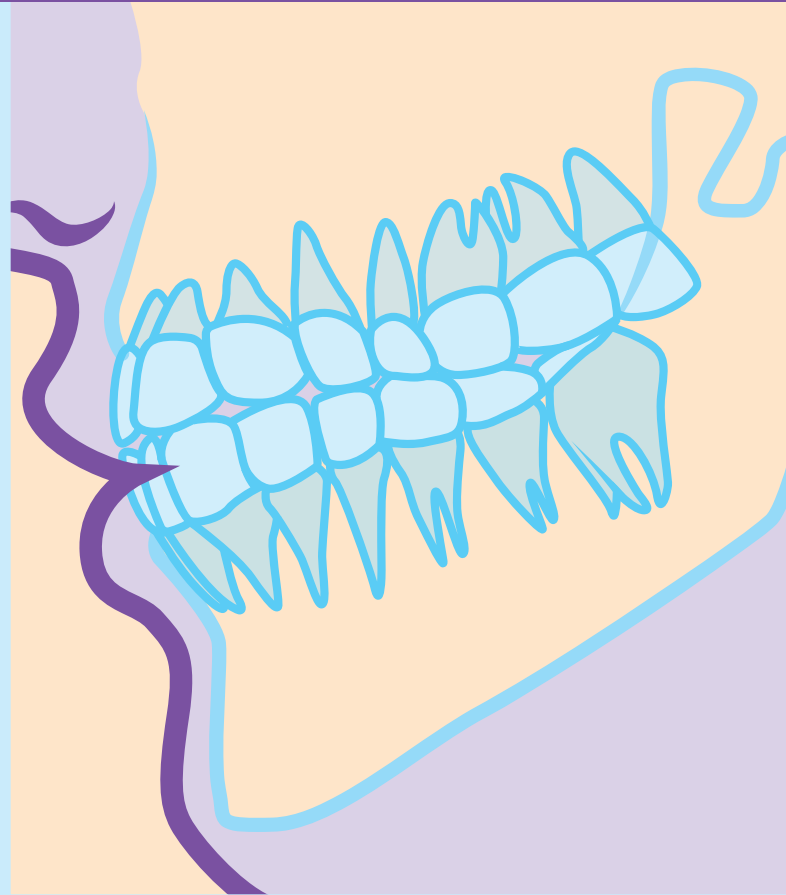


Temporomandibular Joint Dysfunction

The purpose of this leaflet is to improve your understanding of Temporomandibular Joint Dysfunction (TMD) and contains some answers to frequently asked questions. If you have any further questions or concerns after reading this leaflet please ask a member of the surgical team looking after your care.



Where is the Temporomandibular Joint (TMJ)?

The temporomandibular joint (jaw joint) is located in front of the ear where the skull and the lower jaw meet. The joint allows the lower jaw (mandible) to move and function. The joint itself is made up of two bones that are separated by a disc of cartilage. Ligaments and muscles surround the joint. There are also four powerful sets of 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 the jaw joints, the associated muscles and teeth. The symptoms from these conditions vary from person to person.

What are the symptoms?

Common symptoms include:

- Jaw and face pain – usually a dull ache in and around the ear.
- The pain may radiate and move forwards along the cheekbone
- or downwards into the neck
- 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?

Jaw joint problems are usually not serious and do not lead onto other problems (e.g. arthritis of the jaw joint). They are however a nuisance. Fortunately jaw joint problems usually respond to simple treatments and can resolve within a few months.

What causes it?

Pain is caused by the muscles in and around the jaw joint tightening up. Joint noise occurs if the disc of cartilage moves out of its normal position between the bones of the jaw joint.

Most commonly the cartilage slips forwards and a noise is made when it returns to its normal position in between the bones of the jaw joint. The noise sounds louder to some patients than others because the joint is just in front of the ear. The ligaments and muscles surrounding the joint can in turn go into spasm, producing pain and limited mouth opening. A number of triggers exist for jaw joint pain, including:

- A knock to face or jaw
- Unexpected wide mouth opening, like a 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 are the treatments?

Most TMD problems will improve spontaneously over a few months. Treatments vary depending on whether you are suffering from muscle pain, disruption of the internal aspects of 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. This is known as conservative treatment.

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 – this allows over-worked muscles to rest for a period of a few weeks-months.
- Analgesia (painkillers) – anti-inflammatory medication such as Ibuprofen can reduce both pain and inflammation within the joint.
- Local heat – 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.
- Eliminate adverse habits – grinding your teeth, clenching or chewing fingernails can all cause joint and muscle pain. This may be difficult to stop as some habits are done when asleep or subconsciously when you may not be aware of them.
- Relaxation therapy and learning techniques to control tension and stress.
- 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 exercises will have been discussed with you, and it is important to carry them out as instructed for them to be effective.
- A nightguard – this is a soft or hard splint rather like a gum shield which is worn over the lower teeth usually at night. This helps “rest” the jaw joint and the surrounding muscles particularly if you grind your teeth in your sleep.
- Avoid opening wide during yawning – this can cause a strain to the joint ligaments and over stretch jaw muscles, particularly if the yawn involves a very wide mouth opening.
- Physiotherapy - this will be discussed in more detail if this option is appropriate to your care.
- Maintain good dental health – replacing missing teeth to balance the bite may be advised if this is appropriate.

What happens if conservative treatment doesn't work?

The next step is usually the use of medication to help the muscles relax. As with any medication there can be side effects and so it is reserved for cases where conservative management has not been successful. You and the person looking after you care will discuss this to decide if this is the right option for you.

Very occasionally surgery may be indicated. This could involve manipulating the joint whilst you are asleep under a general anaesthetic or, rarely, the surgeon may look into the joint space using a mini telescope. Even rarer is open surgery directly on the cartilage, ligaments and bone.

If you have any further questions or concerns after reading this leaflet please ask a member of the surgical team looking after your care.

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