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## Information for patients



# Temporomandibular Joint (TMJ) Pain Dysfunction

## What is Temporomandibular Joint (TMJ) Pain Dysfunction?

The TMJ 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. Muscles surround the joint.

Problems with the jaw joint are very common but typically only last a few months before getting better. In some instances only the muscles are affected (myofascial pain dysfunction) whereas in others the cartilages and ligaments may also be at fault (internal derangement of TMJ). The most common symptoms are:

- Joint noise – such as clicking, cracking, crunching, grating or popping
- Pain – usually a dull ache in and around the ear. The pain may radiate, i.e. move forwards along the cheekbone or downwards into the neck.
- Headache
- Limited mouth opening

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

## **What causes jaw joint problems?**

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 muscles surrounding the joint can in turn go into spasm, producing pain and limited mouth opening.

## **Why have I got jaw joint problems?**

The cartilage in the jaw joint is thought to slip forwards because of over-use of the muscles surrounding the jaw. This over-use commonly produces tightening of the muscles and may occur as a result of chewing habits, such as grinding or clenching the teeth when under stress or at night. Nail biting or holding things between the teeth can also cause jaw joint problems. Less commonly missing back teeth, an uneven bite or an injury to the jaw can lead to the problem. Often no obvious cause is found.

## **Are my problems anything to worry about?**

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.

## What are the treatments?

Treatments vary depending on whether you are suffering from myofascial pain dysfunction, internal derangement of the TMJ or a combination of both. On the whole treatment is aimed at trying to reduce the workload of the muscles so allowing the disc of cartilage to return to a normal position in the joint.

- A soft diet that requires little chewing – this allows over-worked muscles to rest
- Painkillers - anti-inflammatory medication (e.g. Nurofen) is good and can be taken as either tablets or applied as a gel on the outside of the joint
- Heat – e.g. warm water in a hot water bottle (avoid boiling water) wrapped in a towel applied to the side of the face
- Identifying and stopping any habits, such as clenching or grinding. Remember that these may be “subconscious”, i.e. you may not be aware of them
- Relaxation therapy and learning techniques to control tension and stress
- Jaw joint exercises – the exercises that are best for you will have been discussed by the doctor seeing you. Please remember to carry them out as instructed
- Resting the joint as much as possible – e.g. avoiding yawning
- Providing a clear plastic splint that fits over the teeth and is worn mainly at night. This helps support the joint and surrounding muscles
- Physiotherapy
- Replacing missing teeth to balance the bite – if this is appropriate it will have been discussed with you.

## What happens if these methods do not produce an improvement?

Surgery is only carried out in a small number of cases. This can involve manipulation of the joint whilst you are asleep or more rarely surgery carried out with a mini telescope. In extreme cases it may be necessary to open the joint and operate on the bones, cartilages and ligaments.

## Are jaw joint problems anything to worry about?

It is important to realise that jaw joint problems, although a nuisance, are not sinister and usually respond to relatively simple measures over a period of time. Patients themselves can manage most of these treatments. Occasionally jaw joint problems may return after several years. It is very rare for jaw joint problems to progress to arthritis.

## 4 steps to manage jaw joint pain

### 1. Rest yourself and your jaw

- Relax and practice stress reduction
- Exercise regularly
- Eat soft foods and avoid hard, crusty foods like nuts or hard bread or those that need chewing a great deal
- Chew on your back teeth, not the front ones
- Eat small bites
- Sleep on your side.

## **2. Avoid joint or muscle damage by avoiding:**

- Contact sports; wear a mouth guard if you must play contact sports
- Excessive jaw use in yawning, grinding and clenching
- Chewing gum
- Habits such as biting:
  - Finger nails
  - Pens and pencils
  - Lip
- Long dental appointments or general anaesthesia
- Cradling the telephone between head and shoulder
- Wind instrument playing.

## **3. Reduce muscle pain with analgesics and by applying:**

- Cold packs for 10 minutes every 3 hours for 72 hours after episodes of severe pain then hot packs for 20 minutes every 3 hours.

## **4. Re-educate the jaw opening**

- Open your mouth with hinge movement: exercise your jaw twice daily, opening 5 times in front of a mirror, ensuring the jaw opens vertically downwards without deviating sideways.
- Exercise your jaw 3 times daily for 5 times minutes
  - Close your mouth on the back teeth
  - Put the tip of your tongue on the palate behind your front teeth
  - Move the tongue back across the palate as far as it will go
  - Keep the tongue in this position with the teeth closed for 10 seconds
  - Open your mouth slowly until the tongue starts to leave the palate
  - Keep that position for 10 seconds
  - Close your mouth
  - Repeat over 5 minutes.

## For further Information/Advice

If you have any problems or need further advice please contact Maxillofacial Department at Leighton Hospital on 01270 612479.

You can also get further information from:

NHS Choices

[www.nhs.uk](http://www.nhs.uk)

[www.aboutmyhealth.org](http://www.aboutmyhealth.org)

for support and information you can trust.

British Association of Oral and Maxillofacial Surgeons

[www.baoms.org.uk](http://www.baoms.org.uk)

British Dental Association

Tel: 020 7935 0875

[www.bda-dentistry.org.uk](http://www.bda-dentistry.org.uk)

NHS direct

Tel: 0845 4647

[www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)

**We hope you have found this information leaflet useful. You should read this leaflet following or together with any advice given by your relevant health professional.**

This leaflet is available in audio, braille, large print and other languages. To request a copy please contact the Patient Information Co-ordinator.

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