



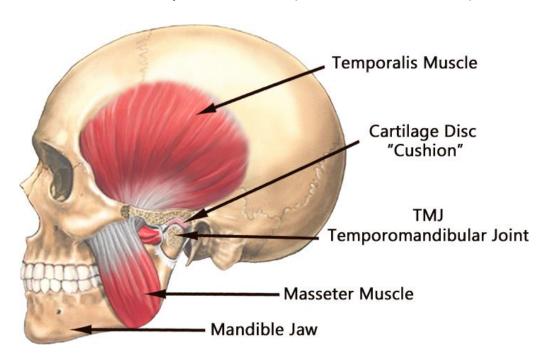
**Patient information** 

Temporomandibular Joint Dysfunction (TMJ)

This leaflet has been designed to improve your understanding of your forthcoming treatment and has answers to many of the commonly asked questions. Please ask if you have any other questions would like further explanation please ask.

#### What is the Temporomandibular Joint Dysfunction (TMJ)

The TMJ is the joint between the lower jaw and the skull. (See diagram below). Like many joints in the body it has cartilage disc separating the jaw and the skull. There are also four powerful chewing muscles which move the jaw into different positions to allow us to speak and chew.



#### Who gets TMJ Dysfunction?

It is generally considered that TMJ Dysfunction is caused by excessive activity in the chewing muscles resulting in jaw clenching or grinding of the teeth. Temporomandibular disorders (TMD) are the second most common cause of orofacial pain after "toothache". They affect up to 1 in 15 of the UK population. Most patients are young (ages 20- 40) otherwise healthy females (and sometimes males).

#### What are the symptoms?

To make a diagnosis of TMJ Dysfunction you must normally have at least two of the three major symptoms. These are:

- 1) **Pain** in the TMJ or chewing muscles which may radiate into the head or down the neck.
- 2) Clicking which is caused by the cartilage disc slipping in and out of its normal position.
- 3) **Limited Mouth Opening** which is due to either muscle spasm or displacement of the cartilage disc causing locking of the joint.

#### What could cause TMD?

TMD has a biopsychosocial aetiology with several perpetuating, predisposing, or precipitating factors with no single 'cause' identified. This commonly is related to overwork/ parafunction such as clenching and tooth grinding, which are thought to be involuntary anxiety relieving mechanisms. Other possible causes but not limited to are trauma; prolonged mouth opening;

other comorbid pain e.g. migraines and abdominal cramps; smoking; diet; poor sleep cycle; and stress. Sometimes the patient can suffer from an abnormal bite because of missing teeth or a small jaw.

In some cases it can be referred pain from the ear and is therefore important this is checked too by your GP +/- ENT specialist.

#### **How is TMJ Dysfunction treated?**

Your doctor/dentist will examine your jaw joint and muscles to detect signs of muscle spasm and limited mouth opening. An X-ray of the TMJ should give reassurance that you do not have arthritis.

Non-invasive conservative care has been shown to be successful in 75-90% of cases.

- Muscle relaxation- Soft diet; heat compress; self-massaging with or without topical antiinflammatory gels e.g. voltarol; oral ibuprofen or similar anti-inflammatory medication; hand support under jaw when yawning.
- 2) Parafunction- Be mindful of things such as clenching when concentration as teeth should be apart when at rest.
- 3) Sleep hygiene and stress management- Cognitive behavioural therapy, show benefit in reduction of distress and pain intensity
- 4) Jaw Exercises These are designed to relax the chewing muscles and retrain the muscles to function in a balanced manner.
- 5) Bite Raising Appliances These are like sports mouthguards constructed by your Dentist. They prevent teeth meeting, this in turn reduces muscle activity. Additionally, it protects the teeth from parafunctional damage.
- 6) Antidepressants The pain killing and muscle relaxant qualities of these antidepressants make them ideal for the management of TMJ Dysfunction.
- 7) Alternate therapies- Depending on location, these may not be provided on the NHS. It is important to be aware that these should not be first line treatment. These include Acupuncture; Botulinum Toxin A; Hyaluronic Acid.
- 8) Surgery Before embarking on surgery, your specialist may require a MRI scan of your jaw joint. You may also be required to undergo a general anaesthetic to look inside the joint with an arthroscope. As the previously outlined measure usually resolve the condition, surgery is rarely used and is generally reserved for severe cases.

#### **EXERCISE 1: Coordination training for all TMD patient**

- a. Sit erect in front of a mirror in good light. Slowly open your mouth making sure your jaw doesn't move to the side. Use a hand lightly on either side of your face to gently guide you to straight opening if you are moving off to one side
- b. Do this in a slow, controlled manner over five-six seconds (one set).
- c. Complete five-six sets up to four times a day.

#### **EXERCISE 2: Isometric tension exercises for muscular TMD Only**

- a. Place the back of your hand under your lower jaw and provide gentle resistance upwards as you try to open.
- b. Try and open against this resistance and hold your opening against this resistance for fivesix seconds (one set).
- c. Complete five-six sets up to four times a day.
- d. The same exercise is completed with gentle pressure placed to the side of your lower jaw while you open and move your jaw to one side.
- e. Again, opening with lateral movement should be against gentle resistance and at maximum opening laterally opening should be help against the resistance for five to six seconds. Complete five-six sets up to four times a day.

## **EXERCISE 3: Clicking jaw joint**

- a. Sit erect in front of a mirror in good light so that it is possible to observe the muscles under your chin contraction.
- b. With the teeth in light contact attempt to slide the lower teeth backwards by contracting the muscles underneath your chin. You should be able to observe these muscles contracting in the mirror. At no time should the teeth be clenched or parted. Only a sliding movement between the upper and lower teeth should be detected. Tension should be felt in the muscles behind the jaw and beneath the chin, pulling the jaw backwards into the neck. You will be able to feel this by putting your thumb on the muscles beneath your chin and under your ear.
- c. Once the art of muscle contraction is learned it should be done for two to three minutes in each hour, not necessarily in front of a mirror.
- d. Pull the jaw backwards as described and while keeping tension on the muscles, begin to open and close the mouth, gradually increasing the extent of opening day by day. If the jaw clicks while doing this exercise, then it is being done incorrectly so start again at A.
- e. Gradually increase the extent of mouth opening until full normal movements are restored without producing a clicks. After practising this exercise for two or three weeks it will become second nature to you and the click will not return.

#### **REMEMBER!**

- TMJ Dysfunction is not a disease but a temporary malfunction of the jaw joint and its muscles
- Many patients get better whether they have medical treatment or not.
- Almost all remaining patients get better with simple non-surgical methods of treatment.

Scan the QR code for self-physiotherapy, jaw exercise, thermal modalities, facial massage and TMD advice videos:



How to contact us
Oral and Maxillofacial Surgery

Watford General Hospital

Vicarage Road

Watford

Hertfordshire WD1 8HB

Monday to Friday, 9.00am - 5.00pm

Tel: 01923 217205

Hospital switchboard: 01923 244366 - Ext. 3855

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Language

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For more information, on our Patient Advice and Liaison Service, visit our <u>website</u>. Or type in: bit.ly/4o3QVFJ

# Where can I park?

Car parking at Watford General Hospital is available in the <u>multi-storey car park</u>. It's pay on exit, so you only pay for the time you need. You can pay by cash or card. The post code for the car park is **WD18 0LT**.

The external car park ticket machines on all sites **only accept cash**. However, you can pay by card via the <u>Saba parking app</u> (excluding AMEX), or search Saba parking app at the <u>App store</u> or <u>Google play</u>.

**Please note**: due to current redevelopment works at St Albans, parking is very limited.

For more information about travelling to our sites and travel concessions, visit our website.

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The diagram was taken from Temporomandibular Joint Dysfunction By Dr Michelle Walker <a href="http://mwcdi.com/tmjdysfunction/">http://mwcdi.com/tmjdysfunction/</a>