

# Management of painful Temporomandibular disorder in adults

## NHS England Getting It Right First Time (GIRFT) and Royal College of Surgeons' Faculty of Dental Surgery.

### Patient Summary Document

This document is a patient summary designed to supplement comprehensive guideline to support the care of individuals living with TMD.

### Overview of Temporomandibular disorders

Temporomandibular disorders (TMD) are common, affecting 1 in 15 of the UK population and predominantly arise in the 20-40 age range. TMD are a group of musculoskeletal conditions that affect the chewing muscles, the jaw joint (temporomandibular joint) and associated structures. TMD can be either muscular in origin (myogenous), joint or joint structure in origin (arthrogenous), or in some individuals the muscles and joint may both be affected. Main symptoms include pain in and around the jaw joint and chewing muscles, worsened with jaw use; joint noises (click, pop, snap); difficulty using jaw normally *e.g.*, reduced opening of the jaw.

If TMD are treated early with simple reversible management techniques, the majority (75-90%) improve and are successfully managed either through resolution or by becoming intermittent and manageable. Some TMD, particularly muscular ones, may become persistent (chronic), lasting greater than 3 months. Those affecting the joint generally remain stable.

There is no single "cause" of TMD. Many different biological, psychological and social factors interplay in an individual resulting in pain. Similarly, there are many conditions which present more commonly in individuals with TMD than those without TMD *e.g.*, Anxiety, depression, fibromyalgia, chronic back pain, irritable bowel syndrome, migraine. Assessment and management by your care providers should include biological, psychological and social factors for both TMD and any associated condition(s) in order to have the greatest chance of improvement.

Supported self-management strategies are self-care techniques which have been proven to reduce TMD pain, the impact of pain and support good jaw function, when completed daily. For a small number of individuals with TMD additional (adjunctive) treatments may be required and your health professional will discuss these and work with you to determine the most appropriate plan for your individual situation.

## Supported self-management strategies.

The following are self-management techniques that your healthcare professional can support you in completing. The QR code and weblink below directs you to a website containing supported the self-management techniques outlined below and videos to help further demonstrate their use.

QR code:

Weblink: [here](#)



## Supported self-management techniques expected to provide benefit for all TMD:

### 1. Changes to daily living and habits

- a. Avoid caffeine as this is a stimulant and likely to increase stress and cause muscle tension
- b. Give yourself time to perform self-care exercises and relaxation techniques throughout every day
- c. When experiencing pain in the muscles or around the joint adapt your diet and take a softer diet with the consistency of foods such as pasta, omelettes etc.
- d. Do not chew gum, pen tops, pencils, nails etc. as these habits will all produce unneeded extra strain in your chewing system.
- e. Apart from when you are eating you should keep your teeth apart.
- f. Examine your posture and try and maintain your head up and shoulders back. Examine your usual positions during the day for instance working at a desk and ensure that they are ergonomic.

### 2. Practice diaphragmatic breathing to aid relaxation.

When first starting to learn how to perform this type of breathing it is easiest to practice it whilst lying down in a dimly lit room without distractions. Concentrate on taking deep slow breaths in through your nose and feeling your chest expand with your hands on your stomach. Your hands will move inwards and slightly upwards if you are doing it correctly. Once you master the breathing there is no absolute need to lie down or be in a dimly lit room, you can just use the technique for five minutes every two hours to aid relaxation and whenever you start to feel tension or stress develop through the working day.

### 3. Thermal modalities (demonstrated at this [link](#).)

Apply moist heat or ice to affected muscles, areas on your head, face and neck where you feel pain. For some people heat benefits, for others cold feels more effective. Trying heat for 3 days and then cold for 3 days may help provide information as to which works for you. A warm moist flannel wrapped around a proprietary heat pack or warm hot water bottle will provide moist heat. Apply for 15-20minutes twice daily to the affected muscles. You can then go onto performing and prescribed exercises; if you have limited opening it will be beneficial to apply moist heat prior to your stretching exercises.

Ice can be applied to affected muscles using an ice pack wrapped in a tea towel placed onto the skin overlying the affected muscle until the muscle feels frozen and numb (usually within 5 -10 minutes of application of covered ice pack).

#### **4. Facial massage** (demonstrated at this [link.](#) )

Temporalis muscle (in your temple): Using index and middle fingers apply gentle pressure to temporal region either side of the head. Make small circular motions applying pressure to any tender regions.

Masseter muscle (in your cheek in front of your ear): Place left thumb inside the right cheek, the left index finger outside the right cheek. Between the thumb and index finger is the masseter muscle. Gentle squeeze thumb and finger together to apply pressure to the muscle. The muscle should be stretched from top to bottom and back to front.

Massages should be completed for one minute per muscle three times a day, using freshly washed (clean) hands.

#### **5. Coordination training** (demonstrated at this [link.](#))

- i. Practice the retrusive position of your jaw ('n-stretch'). Open normally and then curl your tongue to the top and back of your mouth. You should feel your jaw move backwards slightly. Keeping your tongue in this position close in a slow controlled manner over five-six seconds (one set). Complete 20 repetitions up to four times a day.
- ii. Practice opening straight in the mirror and 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 ('n-stretch combined"). Do this in a slow, controlled manner over five-six seconds (one set). Complete five-six sets up to four times a day.

### **Additional techniques for use in specific circumstances**

**Isometric tension exercises for use with muscular TMD** (demonstrated at this [link.](#))

*Only complete this if you have been told that your TMD has a muscular origin (M-TMD).*

Place the back of your hand under your lower jaw and provide gentle resistance upwards as you try to open. Try and open against this resistance and hold your opening against this resistance for five-six seconds (one set). Complete five-six sets up to four times a day.

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. 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.

### **Isometric tension exercises for disc displacement with reduction** [\[84\]](#)

*Only complete this if you have specifically been told you have a disc displacement with reduction.* Place the back of your hand under your lower jaw and provide gentle resistance upwards as you try to open and push lower jaw forwards (protrude jaw) whilst opening. Complete 10 repetitions each held for 5-6 seconds 2-3 times a day.

### **Static stretching for reduced mouth opening** demonstrated at this [link](#).

*Only complete these if you have been told by a professional that your mouth is not opening fully.*

- i) Apply thermal modality (as above) to jaw joints for 5 minutes prior to static stretch exercises.
- ii) Gently open to point of maximum opening
- iii) place your index fingers on the lower canine teeth and your thumbs on your upper canine teeth (fingers and thumbs will be crossed)
- iv) Stretch gently for 30 seconds to the point of discomfort and a small amount further and hold for 30 seconds
- v) Complete 5-6 repetitions up to 3 times per day

### **Mobilisation for disc displacement with reduction and limited opening** demonstrated at this [link](#).

*Only use if you have been told by a professional that you have a diagnosis of disc displacement with reduction and limited opening.*

- i) Lightly hold a small cotton wool roll between your upper and lower front incisor teeth.
- ii) While gently holding the cotton wool roll move the lower jaw to one side then back to the center over 5-6 seconds
- iii) Continue to gently hold the cotton wool roll and move to the lower jaw to the opposite side over 5-6 seconds
- iv) 5-6 repetitions should be completed 3-4 times daily with each movement made over 5-6 seconds in a slow controlled manner

## Patient support resources

Newcastle Upon Tyne NHS Hospitals foundation Trust TMD resources

**Weblink:** [Here](#)

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



Temporomandibular joint association

**Website:** <https://tmj.org/>

**TMD, nutrition and you:** [http://tmj.org/wp-content/uploads/2020/08/TMJ\\_nutrition\\_Guide.pdf](http://tmj.org/wp-content/uploads/2020/08/TMJ_nutrition_Guide.pdf) or [click this link](#).

Orofacial pain UK

**Website:** <https://orofacialpain.org.uk/>

Live well with pain

**Website:** <https://livewellwithpain.co.uk/>

Sleep well with pain leaflet available [here](#).

The Leeds Teaching Hospital Trust/Leeds School of Dentistry

**Patient experience video:** [here](#).

**Downloadable TMD patient pain manual discussed in patient experience above:**

<https://licensing.leeds.ac.uk/product/self-management-of-chronic-orofacial-pain-including-tmd> [150]

Association of Chartered Physiotherapists in Temporomandibular disorder

**Weblink:** [here](#).

*This site, alongside other information can provide support helping to locate a physiotherapist with a special interest in treatment of TMD in your area.*

## TMD FAQs

### What is TMD?

- TMD describes a variety of conditions which affect the jaw joints and or the muscles around the jaw.
- TMD is very common.
- Problems may occur on one or both sides of the jaw.
- Many people have some signs of TMD, but only a small number suffer pain or other symptoms because of TMD.
- TMD can be mostly due to problems in the muscles or mostly due to problems in the joints or a bit of both.
- TMD is not usually serious, and symptoms usually only last a few months before getting better, though they may come back from time to time.
- TMD is generally not a progressive disease and TMD is not linked with causing other serious conditions.

### What causes TMD?

- Today we believe that TMD is caused by many things acting together, some of which may have little or nothing to do with your teeth. These may include changes in some of your body's pain and flight or fight (stress) systems.

### Will it get worse?

- TMD does not usually keep getting worse. In the majority of cases the problem tends to come and go, often feeling worse during times of emotional difficulty. Studies demonstrate that it does not tend to get worse with age.
- Simple treatments and things you can do yourself will help resolve or control TMD in the vast majority of cases.