Dental directorate
Temporomandibular Disorders (TMD)
This leaflet has been produced to provide you with information about Temporomandibular Disorders (TMD) and aims to answer any questions that you may have. If you need any further information, please do not hesitate to ask the dental and or nursing staff caring for you.

There are two key points you should remember:

- **You are the key to reducing your symptoms.**
- **By following the suggestions in this leaflet you can help yourself to manage your symptoms.**

**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.
- 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 may come back from time to time.
- TMD is generally not a progressive disease and TMD is not linked with other serious illnesses.
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. Symptoms such as discomfort and pain can be caused, prolonged, or made worse by the following factors which may act alone or in combination with one another:

- Changes in the way your body responds to pain.
- Changes in your body’s fight or flight response (also known as the stress response).
- Clenching or grinding the teeth together which may occur when you are awake (awake bruxism) or when you are asleep (sleep bruxism) or both. This may be brought on when you are concentrating, extra busy, or annoyed.
- Straining the joints and muscles by chewing pencils, biting nails, holding things in your mouth, holding the telephone between your neck and shoulder.

The common symptoms of TMD are described in the picture below. You may have only experienced a few of these symptoms.
• Overworking the muscles by constant chewing (e.g. chewing gum etc.)

• Bracing the jaw, which means holding it tense, but without teeth clenching.

• Injury to the area (e.g. a blow to the face or surgery)

Some dentists used to think that TMD was caused mainly by the way the jaws and teeth lined up. But research has shown that misalignment of the jaws and teeth is not a major cause of TMD.

**Lifestyle Factors in TMD**

• Smoking is a stimulant and can increase the intensity of pain. If you would like help to give up smoking, please make an appointment to see your GP. Or contact the free Smokefree National Helpline to speak to an expert advisor on 0300 123 1044 (open Monday-Friday: 9am-8pm and Sat-Sun: 11am-4pm or visit [www.nhs.uk/smokefree/help-and-advice/support](http://www.nhs.uk/smokefree/help-and-advice/support))

• Caffeine - too much can make you prone to headaches and also may decrease the effectiveness of certain types of pain medications doctors give you.

• Poor quality sleep or poor sleep habits (e.g. spending too little or too much time in bed) will not aid your recovery. For information on treatment and self-help please visit [www.nhs.uk/conditions/insomnia/pages/treatment.aspx](http://www.nhs.uk/conditions/insomnia/pages/treatment.aspx)

**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. Only a very small minority of individuals experience persistent pain as a result of TMD. The important thing is to get the problem diagnosed and effectively treated.
How is TMD treated?

There are many effective and simple treatments, but the most important part of the treatment is you. What you do often helps the most by reinforcing or enhancing treatments given by your clinician.

Studies have shown that the majority of patients will get better with:

• self-care
• exercises
• use of a splint (bite guard) to reduce tension in the muscles around the face
• relaxation

Occasionally other forms of treatment can be of benefit:

• physiotherapy
• cognitive behavioural therapy
• (a course of) medication.

Only very rarely are surgery or orthodontics (braces) needed for the treatment of TMD. Similarly, adjustments to your bite are very rarely needed as part of TMD management unless you need these restorations anyway to secure dental fitness.

What can you do?

Unfortunately for some people there is not an easily identifiable reason or cause for why they are experiencing pain. We recommend that you watch a short video by the Australian Health Care System in order to explain persistent (“chronic”) pain. The language used is easily understandable. (“Understanding Pain: What to do about it in less than five minutes” https://www.youtube.com/watch?v=C_3phB93rvl
The video describes how different factors may come together to keep pain going. It complements the simple explanation below about how what you think, feel & do can affect the physical symptoms you experience as a result of your TMD.

**Think:**
- “This pain is getting worse”
- “I can’t cope with the pain”
- “There must be something seriously wrong with me”

**Feel:**
- Anxious, worried, stressed, angry, annoyed, frustrated, sad, depressed, helpless

**Do:**
- Increase attention to pain
- Clench/strain jaw joints
- Reduce enjoyable activities

**Symptoms:**
- Pain, stiffness, sleep problems, tiredness
- Headaches
Sometimes, through no fault of their own, people can get stuck in vicious cycles: the things they do to solve a problem may actually be keeping the problem going. An example is given below.

This is why it is important to engage in the recommended self-care steps in this leaflet and to try and do things that you enjoy.

**You are the key** – if you engage with self-care then any other additional treatments provided will work to their maximum benefit.

To get the most benefit you should:

- Keep your teeth apart. Do this when you are not wearing your splint (if you have one). The proper resting position for
your jaw is with the teeth slightly apart and your lips gently together. This allows your jaw joints and muscles to rest. Your teeth should only touch during chewing, swallowing and sometimes speaking. A good way to remind yourself is to put a red sticky dot on something that you look at often, like your computer or mobile phone. Every time you see the red dot remember to make sure your jaw is in its proper resting position.

- Avoid habits like chewing finger nails or gum.
- Avoid straining your neck and shoulders through poor posture. This can occur when working at a computer or holding the phone between your neck and shoulder for a long time.
- A soft diet, for example, eating foods that do not require hard or prolonged chewing can be helpful when symptoms of TMD are most intense. You should return to normal eating habits as soon as pain has started to decrease or if you do not feel any improvements within 2-4 weeks. This is because chewing food is not usually a cause of TMD and so avoiding chewing food will not help in the long-term and may lead to loss of fitness in the jaw muscles. It may also cause you to restrict your diet, which might lead to poor nutrition or interfere with your usual activities.
- Avoid caffeine and smoking. Both of these are stimulants which excite the nerves of your body. If you are in pain any stimulant can make the pain seem worse and increase muscle fatigue.
- If the pain is intense then use the painkillers you would normally take for a headache as per the guidance on the packet. Please check the packet of your painkillers to make sure you can take these medications and please only use them over short periods of time.
- Relaxation – please see the final pages of this leaflet for information about how to do relaxing breathing. Practising
mindfulness has also been shown to improve wellbeing please visit the link below for further information: http://www.nhs.uk/conditions/stress-anxiety-depression/pages/mindfulness.aspx

• You can also do some exercises which have been recommended by physiotherapists. You can find directions on how to do these on the final pages of this leaflet.

If you have tried the self-care steps recommended in this leaflet and you still find yourself struggling, for example:

• You spend large periods of the day worrying or feeling angry,
• often feel nervous, apprehensive or on edge,
• feel that things are getting on top of you,
• find it hard to relax and switch off
• often experience unpleasant physical sensations such as butterflies in your stomach, muscular tension, dizziness or breathlessness.

You may find it helpful to talk to someone who is qualified to help. Please, visit your GP and explain your concerns to them. They will be able to talk to you about effective treatments such as talking therapies or medications.

Remember – be patient the vast majority of patients with TMD will get better by simple methods alone.
Relaxing Breathing

Please try to practise relaxing breathing at least 1-2 times per day.

1. If you are feeling worried or anxious then you can rate your level of anxiety on a scale from 0 to 10 (0 being no anxiety and 10 being the most anxious you have ever felt) and write it down. It is helpful to do this the first time you try relaxing breathing, but you do not need to do this every single time you practice relaxing breathing unless you want to.

2. Please sit in a position comfortable for you in a chair with your head, back and arms supported, legs restfully positioned and close your eyes (if you like).

3. Place one hand on your tummy right beneath your rib cage.

4. Inhale deeply and slowly, send the air as low and deep into your lungs as possible. If you are breathing from your abdomen, you should feel your hand rise, rather than your chest.

5. When you have taken a full breath, pause before breathing out. As you breathe out, imagine all of the tension draining out of your body.

6. Repeat ten times. Breathe in slowly counting to four, before exhaling to the count of four (four seconds in, four seconds out). Hold final breath for 6-10 seconds (whatever is comfortable for you), then exhale.

7. If you rated your level of anxiety at the beginning of the exercise, then re-rate your level of anxiety and see if it has changed.
Physiotherapy Exercises

Exercise One:

This exercise is designed to help you learn smooth and protective jaw opening. It should be carried out in front of a mirror and an ideal time is just after you have brushed your teeth in the morning and evening. During this exercise you should only feel a rotation in the joints as your jaw opens. Make sure you watch in the mirror checking that your jaw opens and closes in a straight vertical line avoiding any sideways movement.

1. Looking into a mirror, place your fingers over your jaw joints.
2. Curl your tongue backwards to the roof of your mouth.
3. Keeping your tongue in this position, open your mouth slowly and smoothly.
4. Make sure your jaw opens in a straight line avoiding any sideways deviation.
5. Repeat this five times twice a day.
**Exercise Two:**

This exercise strengthens the muscles that control jaw movement. This exercise can be carried out when you are relaxing, a good time is whilst watching TV in the evening.

**Starting position**
Start with your jaw in its comfortable rest position with your teeth slightly apart.

**Exercise description**
Whilst opening your mouth, use your hand to rest your jaw on. Hold for the count of five seconds.

Repeat five times each day.
Further Information:

If you have any problems or require further information, please telephone 0191 2336161 and ask the switchboard to transfer you to the department you were seen in (between 9.00 am - 5.00 pm). At all other times, please contact your own Dentist.

Information originally produced by Margaret Corson and Dr. R Wassell, July 2009 updated by Dr. Anna Chapman and Dr. Justin Durham, September 2014

Review date: July, 2018