

Advice for Temporomandibular Joint Dysfunction

This leaflet explains Temporomandibular Joint Dysfunction (TMD), its causes, symptoms and how it is treated. If you have any further questions, please do not hesitate to ask the clinician looking after you.

Significant discomfort of the jaw joint during orthodontic treatment is relatively rare however jaw discomfort in the population's whole is not uncommon. Where there is a collection of relevant symptoms, these are loosely grouped under the term of Temporomandibular Joint Dysfunction Syndrome (TMJDS).

It is quite possible for symptoms of this syndrome to occur during orthodontic treatment and the following information is designed to help you and reassure you.

What is TMD?

Temporomandibular joint dysfunction (TMD) describes a variety of conditions, which affect your jaw joint and muscles.

It is usually a benign muscular condition so it is not harmful. It is not uncommon and you may have it on one or both sides. Many people may have some symptoms of TMD and in some individuals it can cause discomfort.

What causes TMD?

TMD is caused by many things acting together. For many years it was thought that it was caused by the way your teeth are lined up and the way that they meet. However, recent research has shown that misalignment of your jaw and teeth is not a major cause, indeed many people with quite significant derangement of their bite experience no symptoms at all. **Most of the discomfort comes from overusing your muscles and joints.** There are many ways this can happen:

- Clenching your teeth together. You may do this when you are worried, stressed or depressed by some aspect of your life, such as relationships, financial, exam or illness worries.
- Grinding your teeth together. You can do this during the day or at night and again this is thought to be stress-related.
- Habits such as chewing pencils, biting your nails, holding things in your mouth and holding the telephone between your neck and shoulder.
- Overworking your jaw muscles by constant chewing, such as habitually chewing gum.
- Additionally there are other predisposing factors with women being much more likely to experience these symptoms.
- It may be that anatomical variations in the jaw joint itself may make some individuals more prone.
- Quite often some minor injury may precipitate the symptoms such as a sprain from a wide yawn, biting a large apple, prolonged wide opening of the mouth or a direct injury or blow.

Will it get worse?

TMD is a benign condition meaning that it is not harmful and does not cause any long-term damage. The symptoms tend to come and go, often feeling worse when you are anxious. Studies show that it does not get worse as you get older but is actually one of the few conditions, which often seems to get better with age. **In most cases it settles entirely on its own.**

What problems may I have?

Any one or more of the following:

- Jaw discomfort that may be worse when you wake up or at night.
- Jaw discomfort when biting, chewing or yawning.

- Clicking from your jaw joint when you move it.
- Stiffness or locking of your jaw joint.
- Earache.
- Difficulty or limitation of opening and/or closing your mouth.
- Headache
- Difficulty swallowing.

How is TMD treated?

There are many simple and effective treatments but no single cure. Studies have shown that up to 90% of all patients will get better with some self care and exercises together with avoidance of the aggravating factors where possible. For more intractable cases using a customised hard bite guard to reduce the tension in your jaw muscles under the supervision of your dentist, may be appropriate.

Occasionally, other types of treatment can help, such as adjusting the biting surfaces of your teeth, medication or gentle jaw exercises. It is very rare to need more invasive treatment.

What can I do?

Treatment is based around self-care – the more you help yourself, the more effective your treatment.

- Keep your teeth apart. The correct resting position for your jaw is to have your teeth slightly apart and your tongue resting on the floor of your mouth. This allows your jaw and muscles to rest and relax. Your teeth should only touch when you are chewing, swallowing and sometimes speaking.
- Avoid opening your mouth really wide.
- Avoid habits such as chewing your fingernails and gum.
- Avoid straining your neck and back with prolonged poor posture, for example, when you are working at a computer or a desk.
- Massage the affected muscles and apply gentle heat.

- Cut up food into smaller pieces
- Eat foods that you do not need to chew hard or for a long time.
- Do wear the hard biteguard if your dentist gives you one.
- Try to reduce the sources of stress in your life if possible and do more general physical exercise if you can.
- In many cases a sore jaw can be likened to a sprained ankle. You would not run a hundred meters on a sprained ankle so similarly rest your jaw as much as possible!
- Please be patient and remember that 9 out of 10 patients will improve by following these simple suggestions. If your symptoms do not improve or you experience severe pain or swelling of the joint, please consult your dentist who may decide to refer you for specialist advice.
- Finally, try not to think about the problem and especially not to worry about it, as anxiety can cause tension, which can certainly delay improvement.