

Management of painful Temporomandibular disorders in adults: Ultra-brief guide

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

This ultra-brief guide provides a reference aid for practitioners to complement the [comprehensive guideline and summary guideline documentation](#) on managing painful Temporomandibular disorders (also known as TMD). Temporomandibular disorders are a group of common benign, largely non-progressive, musculoskeletal conditions affecting up to 1 in 15 of the UK population. Temporomandibular disorders cause pain and or dysfunction of the TMJ/its structures (arthrogenous temporomandibular disorders), the muscles of mastication (myogenous temporomandibular disorders) or a combination of both. When treated early with simple reversible management techniques, most cases improve. The most effective first step of initial management is supported self-management involving education about good prognosis of temporomandibular disorders and appropriate analgesic use, self-exercise therapy, thermal therapy (modalities), self-massage therapy, dietary modifications, and changing any parafunctional behaviours.

This ultra-brief guide takes you through the **3Ds of temporomandibular disorders: detecting it, diagnosing it, and delivering self-management.**

1. Detecting temporomandibular disorders:

As temporomandibular disorders are the second most common cause of mouth and or face pain after 'toothache' it is sensible to screen a patient for temporomandibular disorders if they have pain you can't localise to a tooth and/or they present with some of the cardinal signs and symptoms of temporomandibular disorders (listed within table 1). To screen for and detect temporomandibular disorders, you can ask the patient to complete the three-question screener the 3Q/TMD [here](#) and at QR code adjacent. It is important to note that this is a screening tool to help clinicians and does not diagnose.



2. Diagnosing temporomandibular disorders:

Following a positive 3Q/TMD screen and in routine (non-specialist) clinical practice, a diagnosis can be achieved using the simplest means possible. A video explaining a simplified examination/diagnosis is available [here](#) and at the QR code adjacent. This examination allows you to determine a myogenous, arthrogenous or combined origin for the temporomandibular disorder. Table 1 summarises the key features of these groups.



Table 1 – Key features/findings of myogenous and arthrogenous temporomandibular disorder groups (Combined origin group has signs and symptoms from both columns)

Myogenous	Arthrogenous
Pain at rest, with jaw movement or elicited by palpation of joint or muscles Myogenous pain might be felt in mouth, face, jaw or temple and in arthrogenous pain it would likely be felt inside the ear or in front of the ear	
Familiar pain[†] when palpating MOM	Familiar pain[†] when palpating or moving joint
+/- Restricted opening present at exam	+/- Restricted opening present at exam
	+/- Jaw closed lock (decreased mouth opening (≤30mm) in last 30 days that is acutely painful in front of ear and may or may not have resolved by time of exam) *
	+/- Joint noises (click, crackling, rustling in last 30 days)
	+/- Deviation in opening
Pain modified with jaw movement, function, or parafunction	

[†]Familiar pain is a **key finding**. It is present when the palpation or action of a structure replicates some or all of the patient's primary complaint of facial or mouth pain.

*Ensure all episodes of trismus are fully investigated to rule out sinister cause (see below)

The likelihood of another pathology masquerading as a temporomandibular disorder is low, but to help prevent a misdiagnosis, **always look and listen out for any red flags** ([NICE CKS guidance](#)). These include: previous history of cancer; lymphadenopathy; pyrexia; face or neck mass; occlusal changes; cramp-like pain (claudication) in the tongue, jaw or temple with eyesight changes; unplanned weight loss; sensory or motor changes; profound or worsening trismus; unexplained oral ulceration or hoarse voice ≥ 3 weeks, persistent nasal drainage or bleeding. If these are present, follow standard referral practice to arrange an expeditious specialist opinion.

3. Delivering self-management:

Self-management is the essential first stage of temporomandibular disorder management and creates a solid foundation for other care that can be added to it. The adjunctive therapies that can be added to self-management are explained in the full/summary guidance and flowchart.

Explanation of temporomandibular disorder and their favourable prognosis with simple therapies is the critical initial step of self-management. There is a patient animation available [here](#) to help with this. There is then a further animation available [here](#) to explain self-management to patients.

Self-management's other core components address immediate symptoms and pain exacerbations: self-exercise therapy, thermal therapy, self-massage therapy, dietary and parafunctional behaviour modifications, and appropriate, time-limited analgesia use. The guideline development group have provided a free-to-use patient guidance document for self-management that you can typeset to your own practice's brand [here](#). Evidence-based guidance for all of the other components below is discussed in videos available [here](#) (and via QR code adjacent):



- **Thermal therapies:** local application of moist heat (warm flannel/covered hot water bottle or proprietary heat pack) to affected structures daily supports relaxation, healing, and reduction of pain and or inflammation. Local application of a covered ice pack can also help with reduction of pain and inflammation.
- **Self-exercise therapy:** facilitates relaxation and rehabilitates masticatory muscles, supporting jaw function and pain reduction. Confidence to use the mandible normally reduces fear and anxiety, improving pain-related disabilities.
- **Self-massage therapy:** a routine of massage techniques twice daily is likely to provide symptomatic relief in the short and long term.
- **Dietary modification:** an inclusive diet containing all major food groups should be encouraged, in addition to ensuring adequate hydration with water. This can help protect against exacerbation of inflammation, and preparing the food in different ways can reduce its impact on painful muscles and joint structures. The patient advocacy agency the "Temporomandibular Joint Association" have produced a useful guide available [here](#).
- **Behaviour modification:** parafunctional activities, e.g., nail-biting, chewing gum, clenching and grinding, if present in substantial intensity or volume, may be implicated as part of the complex multifactorial aetiology but are not a singular 'cause'. Exploring if an individual has any parafunctional activities and if so, suggesting strategies to change behaviour may positively influence s outcome.

Indications for referral:

Major points of referral are depicted on the [flow through the pathway](#). However, it is important to highlight the following:

- Suspicion of malignancy ([NICE recognition guidance](#)) refer Oral & Maxillofacial Surgery (OMFS) under cancer waiting time directive
- Young (<25 years old) & substantially decreased mouth opening (<25mm) – urgent OMFS referral
- Severe arthrogenous TMD – characteristic pain intensity>50; dietary restriction due to pain; mouth opening <30mm; +/- skeletal and/or occlusal derangement – early OMFS referral
- PHQ-9 score ≥ 9 urgent referral to GP re mood/anxiety whilst starting self-management

Other indications for early secondary care or adjunctive medical referral are included in Table 7 of the main guidance.

Summary:

Temporomandibular disorders are a commonly presenting group of conditions that are amenable to simple initial management steps that can be delivered in primary care. These simple initial steps have better outcomes when introduced early, but also form the foundation for any further management. Excluding red flags and making a provisional diagnosis of a temporomandibular disorder of myogenous, arthrogenous, or combination origin means self-management can be instituted early with very low likelihood of harm to the patient and a high likelihood of positive gain over a six-eight week period. If after six to eight weeks there is either no improvement or things start to worsen then an earlier specialist opinion should be sought.