

Epidemiology

Relatively common (10-25% of the pop), but only ~5% of these symptoms seek treatment. May occur at any age, but are more common in women and in early adulthood.

Aetiology

Complex and still largely unresolved. Often multifactorial.

Factors affecting the joint: Trauma, arthritis, gout, spondyloarthropathies.

Factors involving the articular disc: e.g. internal (disc) displacement

Factors affecting muscles and joint function (myofascial pain & dysfn): bruxism (jaw clenching at night); orofacial dystonias, dental malocclusion, chronic pain syndromes, psychological factors

Symptoms

- **Pain** most common symptom. Peri-TMJ, typically ant to tragus, radiating to ear, temple, cheek, and along the mandible.
- **Joint noise** is common in asymptomatic people and is not significant unless pain.
- **Restricted jaw function.** tight feeling (prob muscular disorder), jaw "catching" or "getting stuck" (usually internal derangement). Jaw may lock open or closed.
- **Ear symptoms** possible: otalgia, tinnitus, vertigo, ear fullness and hyper/hyperacusis.

Examination

- Palpate TMJ while patient open/closes mouth. Joint clicks/grating sounds may be felt.
- Measure distance of painless vertical mouth opening (normal inter-incisal dist 4-5.5cm)
- Observing the line of vertical jaw opening: straight or deviating, smooth or jerky
- Palpate head, neck and masticatory muscles for areas of tenderness

Investigations

- ESR and CRP if temporal arteritis and systemic joint disease suspected
- Plain radiographs will show any gross bony pathology such as degeneration or trauma.
- MRI can show more subtle changes and can visualise the intra-articular disc.

Management

Non-invasive treatments

Drug treatments

- Analgesics, NSAIDS, muscle relaxants and antidepressants are options.
- One small case study suggested that **tiagabine** may be helpful for bruxism.

Non-drug treatments

- **Explanation & reassurance:** most TMJ disorders benign & improve with non-invasive Mx.
- **Patient education and self-care:** soft diet; avoiding wide yawning/singing/chewing gum; massaging affected muscles and applying heat; relaxation techniques; reducing stresses.
- **Physiotherapy and postural training.** Jaw exercises can also be used.
- **Behavioural therapy:** biofeedback and proprioceptive retraining programmes.
- **Occlusal splints:** "bite guards" may help with malocclusion or bruxism - little evidence
- **Acupuncture** has been reviewed but the evidence is not conclusive.

Invasive treatments

- Botulinum toxin A (BtA) inj if excessive muscle activity or dystonia is a major factor.
- Intra-articular steroid injection has been used for TMJ inflammation
- Surgery in small minority of patients only. E.g. arthrocentesis and lavage