



# Temporomandibular Disorders

PIER DOCUMENT

## PROBLEM:

Major cause of non-dental jaw and facial pain. 17.8 million work days are lost annually per 100 million full time working adults due to TMD<sup>2</sup>.

Women > Men (3 to 1 ratio) with greatest incidence between age 30-50 years old<sup>1</sup>.

- Disk Displacement peaks at 30 y.o.
- Arthritides peak at 50 y.o.

Classification system<sup>1</sup> includes

- Muscle and myofascial pain – 45%
- Osteoarthritis – 41%
- Osteoarthrosis – 30%

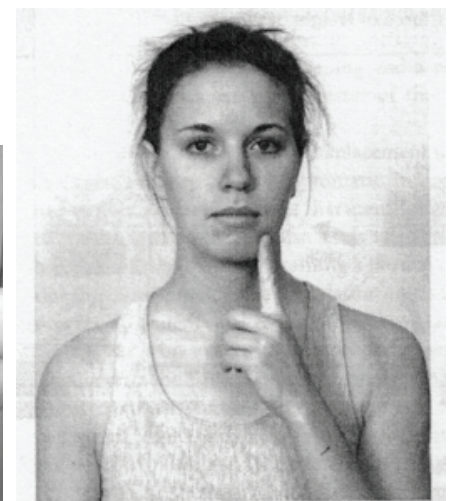


## INTERVENTIONS:

Systematic review articles support multimodal approaches for the management of TMD including<sup>6,7,11</sup>

- Joint mobilization/manipulation
- Soft tissue mobilization
- Active exercise
- Proprioception training
- Relaxation training

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Mandibular lateral excursion isometric; use only force of weight of finger.



## INTERVENTIONS continued...

A manual therapy approach has been shown to be more cost effective and less prone to side effects than dental treatment for TMD<sup>7</sup>.

Dry needling of the facial muscles has also demonstrated positive results in recent trials<sup>12</sup>.



## EVIDENCE:

Shiffman et al. found rehabilitation was as effective as arthroscopic surgery or arthroplasty<sup>4</sup>.

Manual therapy has been shown to be more cost effective and less prone to side effects than dental treatment<sup>5</sup>.

Neuromuscular re education and behavioral changes are more effective than splinting<sup>6</sup>.

Nicolakis et al. demonstrated >85% of patients with TMD treated with PT report excellent functional improvement,

reduced pain, and improved range of motion. Authors also noted 76% of patients required no further interventions up to 3 years following treatment<sup>8,9</sup>.

Furto et al. demonstrated improved short term outcomes following Physical Therapy treatment involving manual therapy and exercise<sup>10</sup>.

Manual therapy interventions to the cervical and thoracic spines, as well as dry needling has demonstrated improved in both pain and disability<sup>12</sup>.

## REFER:

Patients with TMD display signs and symptoms including the following and should be referred to PT as part of a multimodal management strategy.

- TMJ pain and/or myofascial pain in the face, jaw, or neck
- TMJ sounds
- Restriction, deviation, or deflection of the jaw during opening/closing

The American Association for Dental Research reports, “Unless there are specific and justifiable indications to the contrary, treatment of TMD patients initially should be based on the use of conservative, reversible, and evidence based therapeutic modalities.”

## References

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