

Surveying the Prevalence and Nature of Oropharyngeal Dysphagia experienced by adults presenting with Temporomandibular Disorders.

Ó. Gilheaney¹; L. Stassen²; L. Zgaga³; M. Walshe¹. ¹Department of Clinical Speech and Language Studies, Trinity College Dublin, Dublin, Ireland; ²Dublin Dental University Hospital, Trinity College Dublin, Dublin, Ireland; ³Public Health and Primary Care, Trinity College Centre for Health Sciences, Dublin, Ireland.

Background:

Temporomandibular disorders (TMDs) are the most frequent non-dental orofacial pain disorders. They are a variety of conditions associated with pain and dysfunction of the temporomandibular joint (TMJ) and associated structures. TMDs are the second most common musculoskeletal/neuromuscular disorders, and the most commonly reported signs and symptoms include pain, otological symptoms, headache, and TMJ discomfort or dysfunction. These features are often accompanied by restrictions in joint movements, joint sounds, and dental wear. These TMDs are significantly important to research as they may cause difficulties in one's ability to eat, drink, or swallow (oropharyngeal dysphagia (OD)), with subsequent repercussions on quality of life and activities of daily living. However, little is known about the prevalence or nature of OD in patients presenting with TMDs.

Aims:

1. To estimate the prevalence of OD in adults presenting with a range of TMD diagnoses.
2. To determine the prevalence of specific TMD aetiologies in adults presenting with a range of TMD diagnoses.
3. To identify OD management strategies utilised by adults presenting with a range of TMD diagnoses.

Methods:

A newly constructed 18-item survey tool was developed by the authors. This aimed to investigate the following constructs:

1. Aetiology of presenting TMD,
2. Prevalence of TMD-related OD signs/symptoms, and
3. Frequency of use of common OD interventions.

This tool was disseminated over a four month period in 2016 to consecutive patients presenting with TMDs to two national specialist centres of care: oral surgery clinics within the Dublin Dental University Hospital and outpatient clinics within the National Maxillofacial Unit, St. James's Hospital, Dublin.

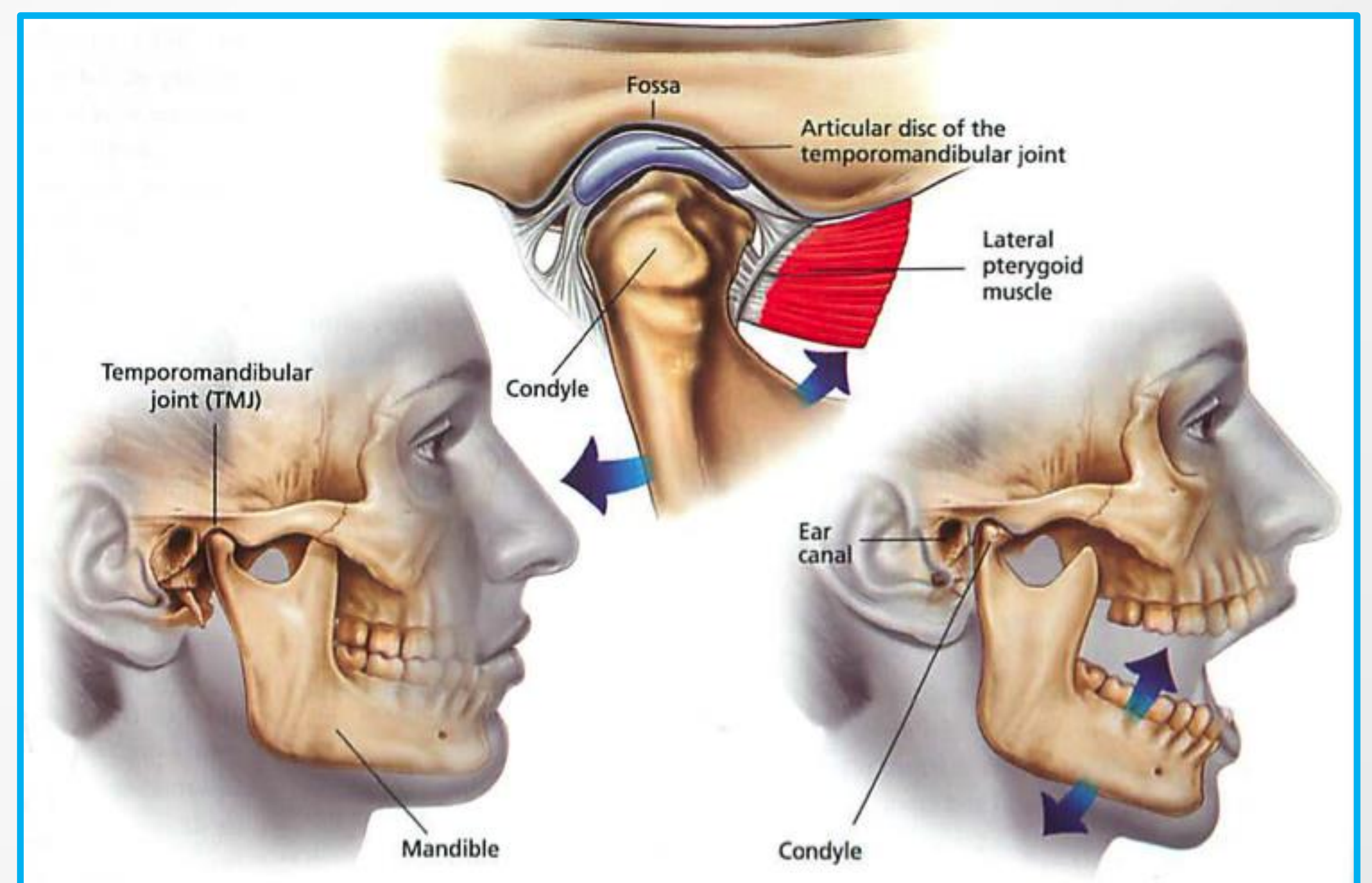


Fig. 1: The Temporomandibular Joint (Ontario Society of Oral Maxillofacial Surgeons. (TMJ) Temporomandibular Joint; 2014. Available from: <http://www.osoms.ca/page-1335630>.)

Results:

81 participants (mean age: 43 years) presented with joint disorders (49.38%), pain disorders (30.86%), and TMDs of unknown aetiology (19.75%). Diagnoses included:

- Arthralgia (4.94%),
- Myalgia (13.58%),
- Myofascial pain (11.11%),
- Disc displacement without reduction (WOR) (22.22%),
- Disc displacement with reduction (WR) (22.22%),
- Degenerative joint disease (2.50%),
- Rheumatoid arthritis (1.23%), and
- Subluxation (2.50%).

78 respondents (96.26%) reported signs and/or symptoms of OD. Disc displacements caused symptoms most frequently, including masticatory impairment (WOR:88.88%; WR:88.88%), masticatory pain (WOR:83.33%; WR:94.44%), masticatory fatigue (WOR:77.77%; WR:83.33%), and dietary modifications (WOR:77.77%; WR:66.66%). Commonly employed TMD-related OD interventions included heat (43.2%), ice (25%), facial-massage (33.3%), and compensatory use of straws (27.1%).

Discussion and Conclusions:

Signs and symptoms of OD are highly prevalent in patients presenting with TMDs, despite limited valid or reliable research in this area. Interventions employed by respondents varied greatly with many of those employed having limited evidence supporting their effectiveness or efficacy. Future research in this field should address the prevalence and nature of TMD-related OD, investigate evidence-based interventions for reported signs and symptoms, and promote collaboration across disciplines with responsibility for the management of TMD-related OD (e.g.: speech and language therapy, maxillofacial surgery, dentistry, and dietetics among other professions).