

## Temporomandibular Joint Disorders (TMD/TMJ)

**Temporomandibular Joint Disorders (TMJD), commonly called TMD or TMJ,** are a collection of poorly understood conditions characterized by pain in the jaw and surrounding tissues accompanied by limitations in jaw movements. Injury and conditions that routinely affect other joints in the body, such as arthritis, also affect the temporomandibular joint. Approximately 35 million people in the United States suffer from TMD. While both men and women experience TMD, the majority of those seeking treatment are women in their childbearing years.

Used alone, biofeedback can improve pain, pain-related disability, and mandibular functioning (Feng et al., 2011). A meta-analysis of 13 studies of EMG biofeedback treatment showed biofeedback was superior to no treatment or psychological placebo control for patient pain reports, clinical exam findings, and/or ratings of global improvement (Crider & Glaros, 1999).

In a review of the literature, Crider, Glaros and Gevirtz (2005) reported on 14 controlled and uncontrolled outcome evaluations of biofeedback-based treatments for TMD published since 1978. The authors concluded that surface electromyographic (EMG) training of the masticatory muscles combined with adjunctive cognitive-behavioral therapy (CBT) techniques is an efficacious treatment for TMD. In a recent pilot study, Criado (2016) reported on EMG-biofeedback training and its success in treating muscle tension and painful symptoms in patients suffering from TMD when compared against a no-treatment control.

The texts *Biofeedback* (Schwartz & Andrasik, 2003) and *Mind-Body Medicine for Primary Care* (Moss et al, 2003) can give a more detailed review and explanation of treating these disorders.

### References:

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