



## It's "TMD" vs. "TMJ" in 2014

**A change in terminology:** The acronym TMJ, which stands for temporomandibular joint, has historically been used to represent the condition where a patient has problems with facial pain. The underlying assumption is that the temporomandibular joint is involved and is the primary problem. As our understanding of "TMJ" has evolved, we now see the temporomandibular joint as the "victim" of the teeth and associated occlusion, and factors acting upon the joint from the cranium, head, neck and trunk. Instead of using the term TMJ when we see these patients the medical/dental team uses the term "TMD" standing for temporomandibular dysfunction.

**The TMJ sits in the middle:** As the TMJ sits between the teeth/occlusion and the cranium, neck, and the rest of the body, it is acted upon by forces on both sides of the joint. A side view of the head (Figure 1) shows us how forward head posture (FHP) results in

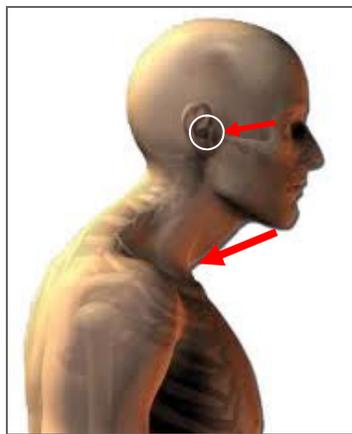


Figure 1

problems for the TMJ from a sagittal perspective. As we move our head forward a backward force occurs on the mandible through the muscles attached from our mandible to our upper chest (supra and infrahyoid muscles). This backward force on the mandible is illustrated in Figure 1 by the red arrows. This backward force on the mandible has been shown to contribute to TMJ instability (Figure 2 black arrow) as the condylar head is pushed posteriorly away from the temple bone/eminence. This posteriorly positioned condylar head in the joint contributes to the disc falling anteriorly off the top of the condylar head. In addition a forward head position increases the work of the muscles that close the jaw and also makes bringing the teeth into occlusion more difficult.

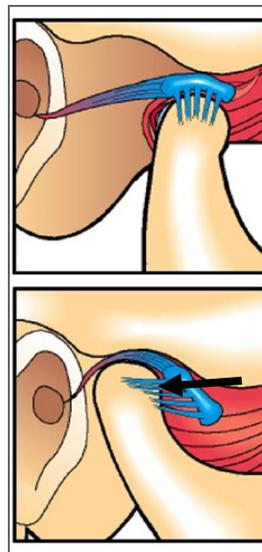


Figure 2

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## Continuing Education on TMD

### **Sam Higdon DDS**

- "Masticatory Function/ Dysfunction/ Dental Occlusion/ Temporomandibular Disorders. March 7th in the Rogue Valley. Morning session -Importance of dental occlusion in the dental practice, Afternoon session — Recognizing the TMJ patient in your practice and what you can do for them. Contact Amanda Davenport at sodentalsociety@yahoo.com to register for the course

### **Bill Esser, MS,PT,CCTT**

- February 1st and 2nd Bill taught on management of disc displacement without reduction for macrotrauma and microtrauma patients in Orlando Florida for Myopain Seminars
- March 22—23rd Bill is scheduled to teach "Evaluation and Treatment of the TMJ" in Seattle Washington. A dentist attending this course provided the following comment: "As a practicing dentist for 30 years, and a massage therapist for the last 2 years, Bill Esser's 2-day TMJ course was, by far the most informative information I have received on TMD". Bruce Austin, DMD, LMT. Register at Empiridence Seminars on line.

*George Fox University Program Bill became an adjunct professor at Pacific University teaching doctoral PT students about TMD*

**This ongoing commitment to continuing education is one of the things that places Jackson County Physical Therapy three years in a row as one of Oregon's**





Care for TMJ patients is offered at two of Jackson County Physical Therapy's four locations.

In Medford, by  
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Dan Brasch DPT

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### Chilly weather chuckles:

- Q: What do you call fifty penguins in the Arctic?  
A: Lost! REALLY lost! (Penguins live in Antarctica.)
- Q: What did the big furry hat say to the warm woolly scarf?  
A: "You hang around while I go on ahead."

### Does it matter if your head's not on straight?

Drawing a line through the pupils and across the lips can help us assess the position of the head in space. Figure 3 is a picture taken of individuals who present with their heads on straight; the lines through the pupils and across the lips are straight with the horizon and parallel to each other. These patients were without TMJ problems, joint signs, and minimal signs of teeth wear. Figure 4 is a picture of patients with their heads not on straight. They have TMJ symptoms, head and neck pain, and occlusal wear and interferences. Patient's with presentations as in Figure 4, when evaluated at Jackson County Physical Therapy, are found to have upper cervical problems which affect the relationship of the temporal fossa to the condylar head, an elevated occlusion on one side, and interferences caused by the neck acting on the mandible. In many patients we see at Jackson County PT we can predict the side of the TMJ problem by head position. It's another reason the PT/dentist team work together with TMD patients to address factors on both sides of the temporomandibular joint.

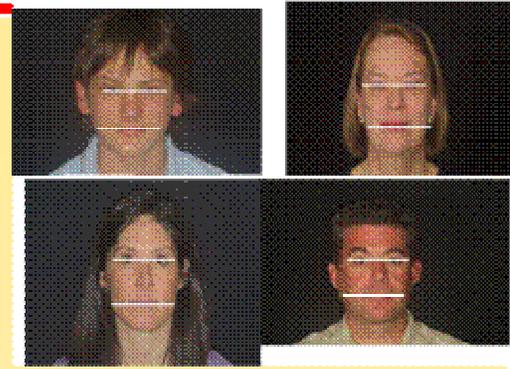


Figure 3

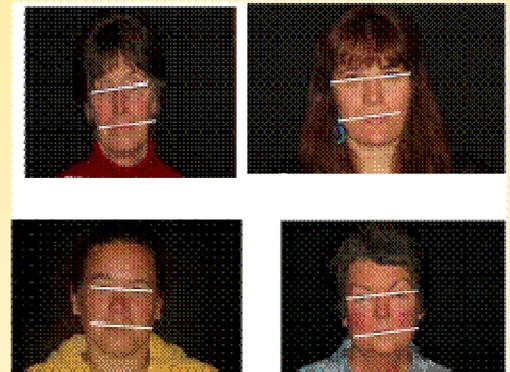


Figure 4

### Research Corner—The Role of Myofascial Trigger Points in Musculoskeletal Pain Syndromes of the Head and Neck (1):

The acronym "TMD" more accurately represents the complex interactions between the temporomandibular joint, the teeth, and the head and neck in this syndrome. This is an excellent article for those dealing with TMD to help understand referral patterns from the neck to the facial area. Forward head posture, common in TMD patients, affects both nerves and muscles in the head and facial area which cause facial pain. Figure 5 is the referral from compression of nerves at the base of the skull to the face. Figure 6 the referral pattern from the Sternocleidomastoid muscle which also shortens in forward head posture. Figure 7 is the referral pattern of the trapezius muscle which overworks in forward head posture to keep the head from falling forward. At JCPT our emphasis is to help the patient obtain a normal head and neck posture removing aberrant forces to both the neck and the TMJ.

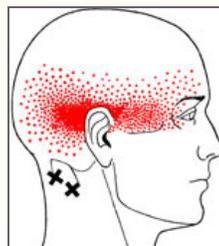


Figure 5

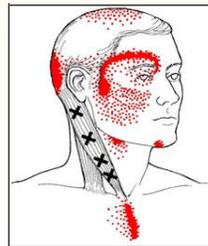


Figure 6

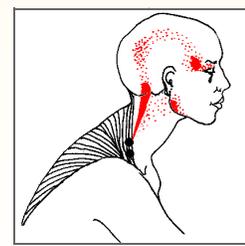


Figure 7

1. Research Corner—The Role of Myofascial Trigger Points in Musculoskeletal Pain Syndromes of the Head and Neck. Fernandez-de-las Penas, C. et al. Current Pain and Headache Reports 2007, 11:365-372. Current Medicine Group LLC ISSN1531-3433.

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