

Orofacial Pain and TMJ Newsletter

“KISS” - Keeping It Super Simple: When to Refer to PT

If at some time 50% of people have TMJ signs (joint noise, locking) or symptoms (pain with chewing, headaches), when is it appropriate to refer the patient for physical therapy? Here are some guidelines presented by Bill Esser, PT, MS, CCTT, at a recent meeting of southern Oregon dental hygienists.

Are they having pain? The temporomandibular joint should function without pain and/or noise. As stated by Mariano Rocabado, DPT, “No Pain No Patient” is not an optimal approach. If your patient’s pain appears to be mechanical in nature, consider a referral to physical therapy.

Are they experiencing new signs or symptoms? A recently developed click, painful chewing, problems with opening, joint or muscle pain all merit evaluation into what causative factors are at play. Time to refer.

Closed-lock conditions are an emergency! Research supports the early mobilization, stabilization by the use of a temporary splint, and return of normal functional opening ASAP (see Fall 2009 newsletter). Refer patients within 24-48 hours by calling our office and identifying the patient as a closed-lock condition. Left unaddressed longer than 4 weeks, there is little likelihood that a semblance of appropriate disc/condylar relationship can be restored.

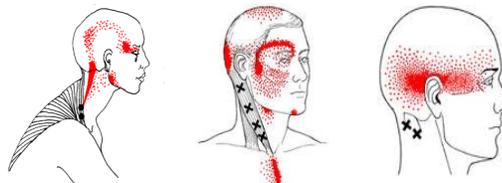
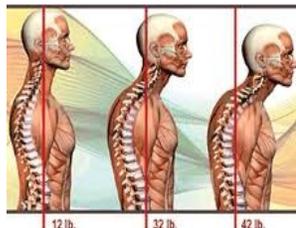


LPTMJ: Look, Palpate, Total range of motion, Muscle then Joint testing - Steps to clarify the source of facial pain

In this newsletter we will examine the value of **LOOKING** before touching the patient -- first from the side, then from the front.

Look - is your patient in forward head posture (FHP)? For every inch the head is forward of correct position over the trunk, its weight increases by 12 pounds (see Summer 2011 newsletter). In FHP, trapezius muscles

must work harder to hold the head from falling forward, the sternocleidomastoid and scalenii muscles shorten, and nerves at the base of the skull are compressed as the cranium rotates backward to keep the eyes level. Trigger points can develop in these muscles which refer symptoms to the head and face, complicating diagnostic procedure and making it harder to tell where the pain is originating. If your patient has symptoms and FHP, referral is appropriate.



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Bill Esser, PT, MS, CCTT

JCPT Happenings

Covered by Bill at the annual meeting of the OBI Foundation for Bioesthetic Dentistry, Dallas, Texas, in November 2011...

- A review of literature on posture and occlusion.
- Current concepts on the relationship of upper cervical spine and occlusion.
- Basic research being done in the Rogue Valley correlating upper cervical dysfunction and changes in occlusion.

If you're curious and would like to discuss this information, please give Bill a call.

Justin Carson will be attending CF2 and CF3, "Intermediate and Advanced Craniofacial" by Mariano Rocabado, DPT, February 17-21 through the University of St. Augustine.

This ongoing commitment to continuing education is one of the things that places Jackson County Physical Therapy among...





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

In Medford, by Bill Esser, PT, MS, CCTT
Justin Carson, DPT, CSCS, OCS
Matt Jurek, DPT, CSCS

In Ashland, by Tim Palmesano, MSPT, SCS

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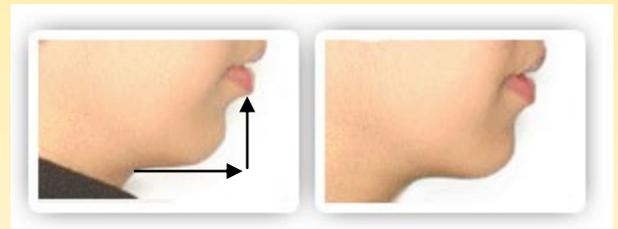
Chilly weather chuckles:

- 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."

Forward Head Posture (FHP) increases tension in the supra- and infrahyoid muscles as the head moves forward. Feel this for yourself: place your hands on the muscles under your chin and feel how they tighten as you poke your chin forward while looking straight ahead. Try swallowing in this position to emphasize how tight these muscles have become. You are now in FHP (see photo). Research implicates this increased backward pull on the mandible as a contributor to the development of Class II occlusions.^{1,2} Rocabado³ states that increased hyoid muscle tension in FHP distalizes the mandible by 1-2 mm, resulting in compression forces backward and superiorly into the TMJ. The posterior pull by the hyoid musculature literally place the mandible in a functional retrognathic position. Unfortunately, this becomes the new position the patient must function in!



In the functional retrognathic position (instilled by FHP), to bring the teeth in contact to swallow on a minute by minute basis, the mandible must move forward to match into the maxillary teeth. (see diagram). Remember: the body will say, "Don't break the teeth." This repetitive forward movement loads the joint with each closure as the condyle is brought forward loading the disc against the eminence. Joint complaints? And FHP? Strongly consider a referral.



"It's Just More Work" - As recorded by EMG studies, the masseters and temporalis musculature have to work harder to close the jaw when hyoid muscles are tight.⁴ Maybe this is one reason for temporalis headaches and masseter pain.

Look (from the front) - Is your patient's head on straight? If lines drawn through the pupils and across the lip are elevated to the same side, there is a high likelihood that your patient has an atlas (C1) rotation. An atlas rotation to the right results in an elevated occlusion on the left with secondary compression of the joint on that side. We find a 90% predictive correlation between the atlas rotation and the side of joint involvement in our clinic. We use "Esser's Rule" - the atlas is rotated to the side of the high eye. Working with local dentists we are assessing, confirming, and consistently predicting wear patterns in the teeth dependent on head/atlas positioning. **We can see the head position in the teeth.** Research is ongoing and we welcome participation by area dentists. If your patient fits "Esser's Rule" and is having TMJ signs and symptoms, a referral is warranted to correct atlas upper cervical dysfunction as it relates to TMJ.



In our next issue we will continue our assessment of the TMJ using the **LPTMJ** mnemonic.

1. Capurso, U et al. Parametri posturali cefalometrici e malocclusioni dentarie. Mondo Artod 1989; 14: 345 - 349
2. Alessandro Nobili, Ricardo Adversis. Relationship between posture and occlusion: A clinical experimental investigation. Journal of Craniofacial Practice. October 1996, Vol. 14, No.
3. Rocabado, M. CF3 and CF4. Spring 2010
4. Golstein et al. Influence of cervical positioning on mandibular movement. L984. J Prosthet Dent 52:421-426

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