Chiropractic Neurology Research Brief

A Quarterly Newsletter for Health Care Professionals by Mark Saracino, DC, DACAN

Volume Six *Issue Two*

Chiropractic Neurologic Management of Temporomandibular Joint Syndrome: Part One - Diagnosis

This issue is not the usual scientifically-indexed research paper, but an article that was published in Doctor of Dentistry Magazine. Click the thumbnail of the magazine's cover to read the article, as it appeared in the magazine, at www.DrSaracino.com or at its "Doctor's Media" link where other published article appear.

It is intended to demonstrate the diversity of my practice. Head and neck pain, a common presenting complaint to chiropractic neurologists' office, is often accompanied by face and jaw pain.

Introduction

The second part of this series will discuss treatments for temporomandibular joint syndrome (TMJ). Chiropractic neurologists, sub-specialists within the specialization of chiropractic, often encounter patients with head, face, throat and neck pain that is, unknowingly, caused by TMJ or cause TMJ due to the stress the patient encounters during recovery. More often than realized, by we not in the dental field, treat either the secondary complications of TMJ or its sequelea. For example, chronic neck pain increases the tension of the spinal erector muscles that originate at the occiput. This irritates the greater auricular nerve which distributes superficially to the temporalis muscle which is a primary jaw flexor. The platysma's posterior pull onto the inferior aspect of the mandible during the rapid neck extension of whip-lash is another example of how commonly seen neck conditions effect the jaw.

Clinical Presentation

Although dysphasia is seldom associated with TMJ, painful chewing often is. Anterior cervical muscular restriction during neck extension and generalized throat tightness, like how one's throat feels during times of stress as having, "…a lump in the throat" are often not associated features of TMJ. The distributions of all three (frontal, maxillary and mandibular) branches of the trigeminal nerve, facial, greater auricular, suboccipital and mandibular nerves are areas of involvement.

Visual Examination

Of course, excessively worn and/or aberrant wear patterns on fillings and articulating teeth surfaces is one of the best methods of suspecting TMJ. For this physical examination, I always prefer the patient to his or her dentist to confirm or deny the diagnosis.

Homolateral deviation of the jaw upon extension, which is best seen from above the head during jaw opening and by viewing the parallel spaces between the superior and inferior midline incisors to determine lateral deviation of the jaw. Diminished anterior glide of the condyle of the mandible usually demonstrates homolateral lateral deviation of the jaw. The closer to the beginning of the opening range-of-motion the lateral deviation is seen the more posterior joint hypomobility is occurring, because this is where the range-of-motion is initiated. Likewise, the further away from the beginning of the opening range-of-motion the lateral deviation is observed more anterior the epicenter of hypomobility. If crepitus is palpated and/or lateral deviation is seen close to extension of the joint malpositioning of the disc is suspected.

Auditory Examination

When audible clicking and palpable crepitus occurs during opening, one should suspect either acute displacement of the disc or chronic hypomobility of the TMJ on the opposite side. This is due to compensatory hypermobility (excess motion) to the opposite side from the obvious biomechanical stresses and/or habitual contralateral side chewing to avoid pain. To assist with this diagnosis, gently insert the fifth digits into the external auditory canals with pads facing anteriorly and another finger's tips onto the lateral aspects of the TMJ bilaterally. Ask the patient to open and close the jaw and observe any lateral deviation of the upper and lower midline teeth while feeling for crepitus with the little fingers and thumbs. The 'other finger tips' help determine lateral deviation of the joints better than visual examination.

Mark Saracino, Board Certified Chiropractic Neurologist
Diplomat American Chiropractic Academy of Neurology
(adjacent to the Valley Forge Convention Center and Radisson Hotel)
1150 First Avenue, suite 120
King of Prussia, Pennsylvania 19406 1341

voice 610 337 3335
fax 610 337 4858
www.ACNB.org
Mark.Saracino1@juno.com
www.DrSaracino.com
(see back issues at "Health Information" link)