

## Pseudo – temporomandibular joint pain – dysfunction syndrome

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*A case of pseudo TMJ-PDS is presented in which a classical sternomastoid trigger point syndrome mimicks dysfunction of the TMJ. Key points in the differential diagnosis are discussed. (JCCA 1988; 32(3): 143-144)*

**KEY WORDS:** temporomandibular, sternomastoid, facial pain, trigger point, chiropractic.

*Un cas de pseudo TMJ-PDS dans lequel un syndrome de zone gâchette sterno-mastoïdienne classique simule le dérèglement de la TMJ est présenté. (JCCA 1988; 32(3) 143-144)*

**MOTS CLÉS:** temporo-mandibulaire, sterno-mastoïdien, douleur faciale, zone gâchette, chiropraxie.

### Introduction

The introduction of a new syndrome dealing with common symptomatology is generally followed by a shift of attention away from established diagnoses in favour of the new syndrome. A clear example occurred with the discovery of the herniated nucleus pulposus by Mixter and Barr, which overshadowed all other diagnoses as the cause of low-back pain and sciatica<sup>1</sup>. Not until 1976 when Mooney and Robertson re-discovered the facet syndrome did research again broaden its focus onto other causes of low-back pain<sup>2</sup>.

Recently, much has been written about the temporomandibular joint pain-dysfunction syndrome (TMJ-PDS). This syndrome is usually described as preauricular pain with radiation along the jaw, to the temple, or behind the eye<sup>3</sup>. Pain may be bilateral, but is more commonly unilateral. Other authors also include symptoms as far ranging as tinnitus, digestive disorders, herpes, hyperactivity, and scoliosis<sup>4,5</sup>. With such a diversity of symptoms allegedly attributable to the temporomandibular joint (TMJ), differential diagnosis of head, and facial pain becomes paramount.

The following case report illustrates the importance of careful investigation of facial pain, and how a premature assumption could lead to prolonged pain, and unnecessary expense.

### Case report

Ms. K.H., a 27 year old fitness instructor presented with left jaw and ear pain of three months duration. Onset occurred gradually after a particularly gruelling weight training session. The pain was aching in character, and located at the left mastoid process to the angle of the left jaw, with radiation to the temporal area, and into the left ear. Her pain was aggravated by exercise classes and especially by sit-ups. Rest was the only relieving factor. She had received a course of manipulation to the left TMJ and a dental appliance without success.

On examination, the range of motion of the cervical spine was painfully restricted by 10° in both right lateral flexion, and left rotation. There were no neurological deficits in either upper limb, or the cranial nerves. Segmental mobility of the cervical facets and both TMJ's was unrestricted. There was no tenderness to palpation of either TMJ, or the muscles of mastication. A trigger point was located in the left sternomastoid muscle which reproduced the patient's pain.

The diagnosis of sternomastoid trigger point was made. She was treated daily for one week with the application of pressure to the trigger point, ice and a home regime of progressive, resisted stretching. Ms. K.H. was pain-free in five days, and had regained a full range of cervical motion by the end of the first week. She remained asymptomatic at her one month follow-up.

### Discussion

In retrospect, the presentation of the sternomastoid trigger syndrome was classic. A strain injury to the muscle probably occurred during exercise, and due to inadequate rest and attention, failed to resolve. Further delay in treatment of the muscle itself occurred when the attention of the consulting practitioners was drawn to the TMJ. The chronic strain allowed the development of the myofascial trigger point. This mechanism has been well documented by Travell<sup>6</sup>.

Examination findings including the shortened sternomastoid muscle, as well as tenderness to palpation, indicated a muscle strain. The location of the trigger point and reproduction of the patient's symptomatology by deep pressure over that point were pathognomonic signs. At this point in the evaluation of the patient (and at this point in our discussion of the case) whether a problem with the TMJ existed or not when the patient first sought professional care, appears to be irrelevant. Therapy directed toward the TMJ, using two diverse approaches – manipulation, and splinting – (both of which have previously been shown effective in the TMJ-PDS) failed to alleviate the pain. Inadequate treatment can not be blamed, since upon further investigation, the TMJ was fully functional and asymptomatic, while the main complaint of facial pain remained

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unchanged. Clearly then, whatever problem did exist with the TMJ, it was not the source of the patient's symptoms.

Normal TMJ function, and the absence of tenderness over the joint itself excluded this structure as a source of pain. Similarly, the cervical spine, which in many cases can refer pain to the head or neck, was dismissed. Although the gross range of cervical motion was mildly restricted, segmental mobility was unimpeded. No tenderness was found over the articular pillars.

Although many professionals from diverse disciplines palpate musculature for tenderness, most often muscle involvement is considered secondary. Chiropractors often view the faulty joint mechanics as the prime etiological factor in most musculoskeletal disorders. In the case of the TMJ-PDS, many dentists feel that malocclusion is the underlying cause. The case presented offers a reminder that muscle syndromes may frequently be the primary cause of discomfort as well.

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