

LETTERS TO THE EDITOR

The Horse Is Dead: Let Myofascial Pain Syndrome Rest in Peace

We share the disquiet of Leano and Kalauokalani [1] regarding section 33 of the recently revised IASP Core Curriculum [2] entitled Muscle and Myofascial Pain. It is clear that this section was written by devotees of “myofascial pain syndrome,” as indeed about half of the three pages of content refers to that construct and its beloved “trigger points.” As much space again in the chapter consists of references reinforcing the dogma.

Let us quote selectively from this curriculum and invite the reader to identify the fundamental problems in the continued assertion that “myofascial pain” should be taken seriously as a clinical entity.

Section I.

A. Understand that the term “myofascial pain” includes a general definition that refers to all muscle pain *and* a specific definition that refers to pain *caused* by myofascial trigger points. (Emphasis added)

Section V. Assessment

Know that the lack of a formal, widely accepted, criterion-based diagnostic scheme has proved to be a serious impediment to proper diagnosis, clinical communication, and research.

B. Be able to identify a trigger point and know the common trigger points *thought* to be responsible for pain. Know that the inter-rater reliability for detecting trigger points is poor in untrained and inexperienced examiners. *Know that the reliability, sensitivity, and specificity of trigger points are unknown.* (Emphasis added)

Section VI. Treatment

Know that the *best evidence* for the treatment of myofascial pain is *extremely limited*. (Emphasis added)

To summarize these curricular injunctions:

- I. Muscle pain and myofascial pain are synonymous; if myofascial trigger points cause myofascial pain—a classic circular argument—then they must cause all muscle pain. It must be noted that myofascial trigger points are, by definition, painful. It follows that a painful phenomenon causes all muscle pain. The tautology is blatant; the circular causative argument is brazen. Not very intellectually satisfying for a student.
- V. After more than 20 years since the Travell & Simons publication [3], there is still no “formal, widely accepted, criterion-based

diagnostic scheme”! And why are “the reliability, sensitivity, and specificity of trigger points” still “unknown”? Would a student’s eyebrows not be raised?

- VI. There is no evidence. Not much for a student to know.

Over a decade ago, we exposed the trigger point hypothesis as epistemologically unsound [4]. Yet the authors of this curriculum beg the question and trot out the same theories of trigger point development and perpetuation, in the face of evidence of refutation.

According to Mense et al., “a dysfunctional neuromuscular endplate appears to be the central factor for the development of trigger points” [5]. This hypothesis is supported by “newly discovered” electrodiagnostic findings (spontaneous electrical activity at active loci that are closely associated with dysfunctional end plates), together with “newly identified histogenesis of trigger points” that recognize “contraction knots as the key features, which are apparently closely related to active loci.” On close examination, these novel findings turn out to be errors of interpretation, firstly, of the electrodiagnostic examination regarding end-plate potentials [6] and secondly, of the clinical examination from which “contraction knots” are merely inferred [5].

In a recent large retrospective study of muscle biopsies performed when investigating isolated muscle pain, heterogeneous myopathic changes have been identified in over 50% of patients [7]. Though most changes have been minimal, some specific structural and fiber-type abnormalities have been seen. However, the authors concluded that their pathogenic significance was unknown.

We are reminded of Koestler’s Society for the Prevention of Cruelty to Dead Horses [8]. With tongue in cheek, he saw it as “a secret society with internal ramifications and with a considerable influence on the intellectual climate of our time.” The myofascial pain/trigger point theorists have already been reported to that Society.

But not only do they refuse to throw away the whip but also now they want to foist the carcass on our curriculum. Dismount, jockeys, your horse is DEAD.

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- 3 Travell JG, Simons DG. Myofascial Pain and Dysfunction: The Trigger Point Manual. Baltimore, MD: Williams And Wilkins; 1983.
- 4 Quintner JL, Cohen ML. Referred pain of peripheral neural origin: An alternative to the "myofascial pain" construct. *Clin J Pain* 1994;10:243-51.
- 5 Mense S, Simons DG, Russell IJ. Muscle Pain. Understanding Its Nature, Diagnosis and Treatment. Philadelphia, PA: Lippincott Williams & Wilkins; 2001:205-88.
- 6 Johnson EW. More on endplate noise (Editorial). *Am J Phys Med Rehabil* 2002;81:161.
- 7 Filosto M, Tonin P, Bertolasi L, et al. The role of muscle biopsy in investigating isolated muscle pain. *Neurology* 2007;68:181-6.
- 8 Koestler A. The Ghost in the Machine. London: Hutchinson & Co., Ltd.; 1967:348-53.