

From the Editor

We begin this issue with a clinical review of the combined data of two “pivotal studies” from Dr. Lew. He was part of the team that conducted these two excellent double-blinded randomized controlled trials using Botulinum Toxin Type B. The first study looked at Botulinum B in Type A responders, and another study looked at a group that had ceased responding to Type A. These two studies are significant since they delineate that the two FDA approved serologically distinct toxins both can be effective in cervical dystonia, and that B can be effective after A has theoretically been rendered ineffective by antibody formation.

In the first research paper, Dr. Ardiç and his team report a prospective randomized, active controlled trial comparing transcutaneous nerve stimulation and electrical muscle stimulation on myofascial trigger point/myofascial pain in the upper trapezius muscle. This is a well-designed study with an active/functional outcome: Range of Motion. The authors report early on that TENS was effective, and that at 3 months, both treatments were effective in the management of subjective pain and improving range of motion. There was no significant difference between the groups at any time.

Dr. Pääsuke reports a controlled trial of electromyographic mean spectral power frequency (MPS) vs endurance, in chronic low back pain patients vs healthy controls. They show that the back pain patients have significantly shorter endurance time than healthy controls, that MPS significantly declined as time of isometric contraction progressed, and that the slope of this decline was greater in back pain patients. This paper underscores the fact that MPS may prove to be an important objective outcome in the design of pain trials. Dr. Mayer and his colleagues examine the impact on isometric lumbar extension strength after training, using traditional pelvic stabilization techniques vs training on a lumbar dynamometer. Here, they show that peak isometric torque increased for both groups and

that there was no significant difference between the groups. The lumbar dynamometer may also represent an important addition to quasi-objective outcomes in pain research.

Dr. Hsu and her colleagues report that nicotine and caffeine intake were greater in Complex Regional Pain Syndrome (CRPS) patients who report pain related anxiety, but did not influence pain intensity. The smoking prevalence was higher than the national average among patients with CRPS. It is possible that these sympathomimetic alkaloids that are ubiquitous in our society may have a pre-disposing or perpetuating effect in patients with CRPS. This will need to be analyzed using a prospective and controlled design, and will require a large cohort to establish significance.

Dr. Nissan et al. report a retrospective/pilot survey comparing signs, symptoms, “objective” imaging and electrophysiologic studies. They emphasize our struggle with the fact that there is no gold standard test for “whiplash” (a wastebasket diagnosis that is probably most consistent with Myofascial Pain Syndrome). The authors also suggest that we design prospective and controlled studies to perform internal validation (cluster and/or factor analysis) and external validation (sensitivity, specificity analysis) in this population. On this basis, we could begin the process of establishing a statistical base for developing better criteria for the diagnosis of these nebulous disorders. Finally, Drs. Walker and Silver report a very interesting case of a complicated shoulder dislocation. They show electrodiagnostic evidence of a complete musculocutaneous and a partial axillary nerve lesion, a combination that is previously unreported.

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Editor-in-Chief