Letter to the Editor

Reader's Response:

Dr. Ko is to be commended for his comprehensive article, "Fibromyalgia Pain: Is It Treatable?" (Feb. 2011, Vol. 28 No. 2), in which he noted that the widespread pain of fibromyalgia is highly resistant to pharmacological treatment options.[1] In our experience, we have found fibromyalgia treatable; in fact, it is no more difficult to treat than other musculoskeletal problems. The critically important factor for effective treatment is to obtain an accurate diagnosis.

Fibromyalgia is a clinical condition, and diagnosis depends on comprehensive and relevant physical examination.[2] Fibromyalgia is not caused by ongoing noxious input; therefore, similar to other physical conditions, such as carpal tunnel syndrome, it will not respond to pharmacological analgesics.

Widespread pain and tenderness are features of myotomal allodynia, secondary to peripheral neuropathy.[3] "Neuropathy" describes a condition where there is altered function in a peripheral nerve, although there is not necessarily any structural change.[4] Peripheral neuropathy is widespread; it generally follows spondylosis and usually involves the spinal nerve root.[5]

Peripheral neuropathy is easily diagnosed, as it is consistently accompanied by segmental physical signs such as trophedema (Figure 1), which we find to be a valuable diagnostic finding. Pain is a common, but not inevitable, companion.

We have found that reflex stimulation of the spinal nerve root (application of a dry needle to stimulate affected myotomes) is an effective treatment.[6] Our Institute for the Study and Treatment of Pain was a pioneer in challenging the old narrow definition of nociception as the sole cause of pain. We have elaborated on the art of spine examination and have taught dry-needling (intramuscular stimulation, or IMS) to large numbers of physicians and therapists.

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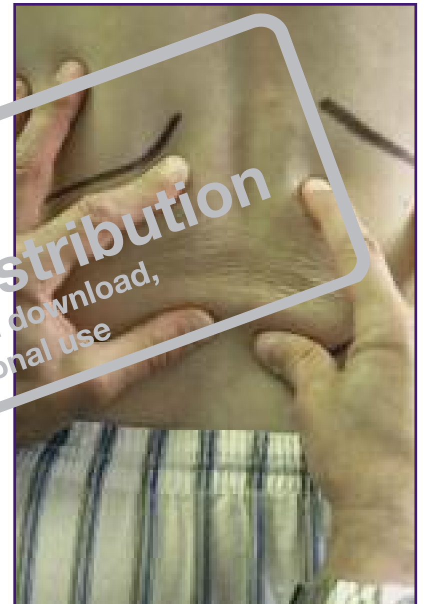

Figure 1: Trophedematous skin when gently squeezed together

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Author's Reply:

I appreciate the letter from Dr. Chan Gunn. In our multidisciplinary Markham clinic, we have three physiotherapists, one osteopath, and a former MD, who utilize Dr. Gunn's intramuscular stimulation (IMS) acupuncture. Many of our chronic pain patients will have gone through a trial of IMS before the addition of injections such as botulinum toxin-A and platelet-rich plasma described in the third fibromyalgia (FM) article.[1,2] The goal of all such treatments is to correct the biomechanical abnormalities and to facilitate progressive exercise in restoring long-term function.

One observation while treating FM patients is the significant cutaneous allodynia that can be aggravated by any form of dry-needling (as well as injections, deep massage, and "work-hardening" exercise programs). Pathophysiological studies show that 27.8% of FM patients have neurogenic inflammation in the skin (with high levels of of IL1-B, IL-6, and TNF-A), which may explain this.[3] Such patients typically need to be treated with FM-neuropathic pain medications (such as pregabalin, duloxetine, tramadol, or pharmaceutical cannabinoids) before needles can be utilized. Those with marked dermatographism may also benefit from antihistamines prior to needles. Even then, a "go slow, go low" IMS or injection approach is recommended for the first few sessions, and preferably it should be done by a practitioner with 10 or more years of experience.

Another distinction to make is the use of the terminology "peripheral neuropathy." For traditional neurologists (and physiatrists like myself), this usually applies to a diagnosis made by traditional electromyogram and nerve conduction studies. These tests are usually negative in FM patients, though results are sometimes positive for undiagnosed carpal tunnel syndrome (14% of FM patients).[4] Motor radiculopathies are rarely diagnosed, even in patients with comorbid disc disease or spinal stenosis. Sensory radiculopathies cannot be detected by EMG. The finding of trophedema is helpful, as seen with Dr. Gunn's skin-rolling test; also useful is his matchstick test, which uses the wooden end of a cottontip stick (Figures 2 and 3). Trophedema may also be seen in complex regional pain syndromes, for which there are specific diagnostic criteria.[5] Hence, to avoid confusion when dealing with the neurology community, it may be more appropriate to use the concept of peripheral nerve or spinal root "irritation" or "dysfunction." We have also utilized quantitative sensory testing to help in such documentation, since temperature and pain are conducted by the same A∂ and C fibres. This testing has high reliability and validity and is a very useful confirmatory diagnostic tool for neuropathic pain and FM.

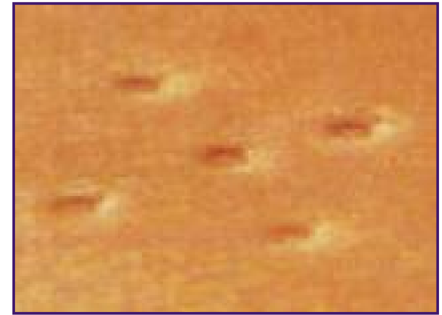

Figure 2: Cottonstick application

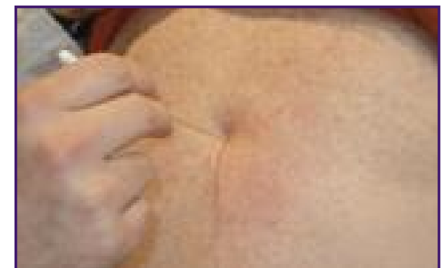

Figure 3: Trophedema with persistent impressions in skin

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