## painmanagement

SPECIAL INTEREST GROUP

## PRESIDENTS MESSAGE

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## FIBROMYALGIA AND THE CENTRAL NERVOUS SYSTEM

When I saw my first fibromyalgia (FM) patient in the late 1970s, there was a paucity of literature to guide the treatment plan. Initially called "fibrositis," the thinking at that time, was that the disorder was inflammatory and confined to "lazy, neurotic females." Treatments were limited to nonsteroidal and steroidal anti-inflammatory agents, analgesics, local heating modalities, and strengthening exercises. Interestingly, when men also reported widespread pain, sleep disorders, memory deficits, etc. the term Fibromyalgia with diagnostic criterion was published.

Over the years, there has been an increased body of knowledge about the causes, effects, and treatments of FM. Acute or repetitive muscle injury has been associated with FM pain that produces widespread central sensitization from augmented pain processing of the peripheral nociceptive signals. Staud postulated that glial activation by cytokines and excitatory amino acids play a role in the initiation and continuation of this central sensitive state.<sup>1</sup> Fibromyalgia patients are found to have greater sensitivity to auditory, thermal, and pressure stimuli as well as temporal summation of pain, known as "wind up and wind up after- sensations." Clinical intensity of FM can be predicted by the combination of the amount of wind up after-sensation, tender point count, and negative affect.<sup>2</sup>

When FM patients held 30% of maximal voluntary isometric contraction of handgrip for 90 seconds, they developed increased hyperalgesia in both local and remote areas compared to normal controls that developed hypoalgesia of both local and remote areas. This indicates an altered central pain mechanism that FM patients have which may be from either abnormal descending inhabitation or excessive activation of muscle nociceptive afferents.<sup>3</sup>

Along the same lines, and as an answer to OP Editor Christopher Hughes's call for student papers, this issue's topic was written by an Ithaca College student who I had the pleasure of having in my clinic this summer.

The next project that the PMSIG will undertake will be a practice analysis of the pain management physical therapist. All thoughts on this matter will be greatly appreciated and can be sent to johngarzione@frontiernet.net.

Enjoy the fall and Happy Thanksgiving. - John