

Adjudicating fibromyalgia.

Confusion, concerns, and possible solutions.

To the Editor:

Three articles published in a recent issue of the *Journal* (1-3) raise important questions requiring further comment, even ongoing discussion. The first article, a commentary by Fitzcharles et al (1) entitled "Adjudication of fibromyalgia syndrome: Challenges in the medicolegal arena" raises more questions than it provides answers. A commentary by Harth and Nielson (2) attempts to deal with some of the issues, and this is followed by a Letter to the Editor by Fitzcharles et al (3) responding to Harth and Nielson.

Although Fitzcharles et al (1) focused on the issue of injured workers becoming disabled by fibromyalgia (FM) resulting from work-related accidents, their statements have implications for a much wider audience. They question fundamentals of the diagnosis of FM, raise concerns regarding malingering and secondary gain, as well as suggesting which physicians should provide input to a tribunal. They believe the family physician would be better placed to provide information than some "parachuted-in specialist". Recent changes to the diagnostic criteria for FM from 2010 ($\underline{4}$) as well as the Canadian guideline from 2012 ($\underline{5}$) are discussed. Overall, the contributions by Fitzcharles et al (1) and many of the authors they cite serve to demonstrate the mass confusion around the diagnosis of FM versus other causes of musculoskeletal pain. The crux of the problem may best be illustrated by a quote from one of the authors whom Fitzcharles et al cite, Dan Buskila, who made the following statement in response to a question whether myofascial pain syndrome (MPS) was a differential diagnosis to FM in his clinical research on FM in individuals who had sustained cervical injuries.

"I am a rheumatologist, and we rheumatologists do not know anything about myofascial pain syndrome."

This exchange followed his presentation of his work at the Myopain World Congress in Portland, Oregon, in 2001. He might not have been entirely serious, but was, nevertheless correct. With a few notable exceptions, most rheumatologists and physiatrists have demonstrated serious lack of knowledge about MPS, which, by some authorities, is regarded to be the most common cause of postaccident pain (vide infra). General knowledge and understanding of FM and MPS, the two most common causes of serious musculoskeletal pain, has not progressed since 2001 and a regression may, in fact, have occurred with publication of the new diagnostic criteria for FM produced in the United States in 2010 ($\underline{4}$) and the guideline produced in Canada in 2012 ($\underline{5}$), because they markedly blur the lines between the two conditions.

In their first article, Fitzcharles et al $(\underline{1})$ discussed the high incidence of disabling pain postaccident and they stated, "Beyond causation, persistence of symptoms must be judged on two other fronts, namely additional contributing factors and the claimant's effort to mitigate the health condition."

This brings to mind the sad story of a previously very healthy 28-year-old man who sustained a back sprain at work and who was sent for physical therapy with therapists who were adherents of the McKenzie back extension method ($\underline{6}$). While this therapy was helpful for many individuals with acute back pain, for some, it proved ineffective ($\underline{7}$).

When we saw this man two years later, he had intractable chronic spinal pain and a severe sleep disorder. He related he had attended the above therapy three times per week for many months. Each time he performed a back extension the pain markedly intensified, and he begged to stop. He was told he had to continue or his wage replacement payments would cease.

What happened to this man is similar to the methods used by experimental researchers when they created models of chronic pain in laboratory animals: they inflicted repeated high-intensity painful stimuli over a period of time (§). While the therapists involved may have been trying to help this young man, the case illustrates the problems with persistent lack of knowledge about pain management among many therapists and even many experts in the field of pain. This ignorance may explain the high cost of WSIB and other compensation systems more than lack of effort or even malingering by injured workers. Fitzcharles et al (<u>1</u>) go on to discuss quality of evidence, stating, "Any document provided to assist the courts must be sound and reflect current medical evidence." The problem in the field of pain in general, and FM in particular, is the lack of good-quality clinical medical evidence. This is demonstrated by several of the authors whom Fitzcharles et al (<u>1</u>) cite, including Swedish investigators who performed a lot of the early work on what they termed "primary fibromyalgia" (<u>9</u>). Their case descriptions and apparently effective clinical therapies suggest strongly that their patients suffered from MPS, not FM. At a meeting in London, Ontario in 1989, Margareta Bengtsson described the benefits of peripheral local anesthetic blocks as well as sympathetic nervous system blocks in their patients. Such interventions do not benefit patients with pure FM, but can be extremely effective in MPS. This was published in *Pain* in 1988 (<u>10</u>).

Fitzcharles et al (1) also cite Schrader et al (11). These Norwegian neurologists went to Lithuania to prove what they already 'knew', that in a country without generous automobile insurance payouts so-called 'whip-lash' disorder would not exist. Their findings were published in *The Lancet* (11) and were widely quoted, presumably because they supported widely held biases, despite the fact their data were inadequate to draw any conclusions, as discussed by Merskey (12). Schrader et al had inadequate numbers (only 202), most of whom were male and, while these individuals had been involved in rear-end collisions, this is not synonymous with having sustained a whip-lash injury. Furthermore, seatbelts were not mandatory in Lithuania at that time. Because women are four to eight times more likely to suffer chronic pain (13), and the use of seatbelts, while saving lives, may produce higher rates of whip-lash injuries (14), the Schrader data were not sufficient to support their conclusions. Fitzcharles et al (1) used Schrader's flawed results to illustrate potential secondary gain situations.

Fitzcharles et al also cite Buskila et al ($\underline{15}$), as previously mentioned, and this group's work, "Increased rates of fibromyalgia following cervical spine injury: A controlled study of 161 cases of traumatic injury" ($\underline{15}$). This was good clinical work, except that the description of cases strongly suggests the individuals suffered from MPS, not FM.

The inclusion by Fitzcharles et al $(\underline{1})$ of the above materials is ironic in view of their admonition that "any publication cited in a medicolegal setting be of good quality".

The field of pain management addressing musculoskeletal pain, and particularly with respect to FM, has not been advanced with the publication of the 2010 ACR diagnostic criteria (4). In this author's view, these criteria represented a victory of the more vocal (Clauw et al) over the more knowledgeable (Drs Robert Bennett and Roland Staud, among others). The creation of the Canadian guideline has been unhelpful in that it similarly blurs the lines between FM and MPS. The process for deciding the contents to be included in the guideline used a simple voting system, leaving those of us with dissenting views without impact on the results. Historically, the democratic process has not been beneficial in matters of science, cf., Giordano Bruno, Galileo Galilei and others.

The main weakness of the new diagnostic criteria is that they absolve the clinician of performing relevant physical examinations; determining presence and number of tender points is no longer required. This will hamper the detection of MPS, which should always be a main differential diagnosis. Polymyalgia rheumatica, Ehlers-Danlos syndrome and postpolio syndrome are less common differential diagnoses.

The decision to omit tender point evaluation appears to have been done, in part, to accommodate the many physicians who had never learned to perform this simple physical examination and, thus, represents a 'dumbing down' of diagnostic criteria – a probable first in medical history. It is akin to abolishing chest auscultation (assuming that a majority of physicians never acquired necessary skills using the stethoscope), and so lumping asthma and chronic obstructive pulmonary disease together. This would lead to suboptimal treatment for a large number of patients (the asthmatic patients), as is currently the ase with patients suffering musculoskeletal pain, particularly MPS.

FM tender points and MPS trigger points are frequently found in the same locations (<u>16</u>). A key difference is that pressure on a tender point evokes pain locally, a bit like pressing on a very sensitive bruise. Pressure on a MPS trigger point causes intense pain that frequently radiates into the described referral zones (<u>17</u>), and may cause the taut band within the affected muscle to twitch. Muscle spasm is not a feature of FM, but is very commonly observed in MPS, particularly in the paraspinal muscles in cases of spinal pain.

MPS is usually regional, not as widespread and, crucially, if effective treatment is NOT rendered in a timely fashion (before six months post-onset), transition to chronic pain occurs through well-described neuropathological changes, and cures are no longer possible; trigger point injections can still, however, provide more complete pain relief than any other modality, but the relief usually lasts only a few days. Then the pain returns. One of the most common and effective treatment modalities is injecting the

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trigger points with local anaesthetic, work pioneered by Janet Travell (<u>17</u>), and also adopted by John Bonica (<u>18</u>) and Devin Starlanyl (<u>19</u>). Many clinicians performing this work now add very low dose steroid to the local anaesthetic, based on patient feedback on prolonged effectiveness. This practice was supported by the finding of a team from the NIH, demonstrating inflammatory mediators in the dialysate of active trigger points (<u>20</u>).

In the second edition of his textbook, The Management of Pain, John Bonica stated:

they (myofascial pain syndromes) are the most common musculoskeletal disabilities of the shoulder girdle, neck, low back, and to a lesser extent, the chest and ribs. They are certainly amongst the most frequent causes of severe disabling pain

(Introduction to Chapter 21, The Management of Pain) (18).

In a subsequent chapter, he commented on the pervasive failure to properly diagnose and treat patients suffering from MPS:

I believe that this lack of recognition of myofascial pain syndromes occurs mainly because primary care physicians, who treat about 60% of back pain patients, orthopedists, who treat another 25, and internists, who care for the rest, are completely unaware of their existence. Consequently, their patients are treated improperly for other conditions, with the result that they progress to a chronic pain state. Correctly diagnosed and treated, however, it has been found that patients are not only quickly relieved of their pain, but their function Is restored and they return to work sooner

(Chapter 72) (<u>18</u>).

It is crucial that all physicians seeing, treating and adjudicating patients with musculoskeletal pain acquire all relevant knowledge about the two main differential diagnostic conditions, FM and MPS, because there is major differences in effective treatment strategies. Most importantly, MPS can be *cured* with timely interventions. The current diagnostic criteria lump these two conditions together, risking suboptimal treatment for MPS patients leading to needless disability. Useful clinical research previously published, needs to be properly reassigned. When all this has been achieved, diagnostic criteria and guidelines that would be useful to both researchers and clinicians could be drafted.

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