Rheumatologists have done much to champion the cause of chronic pain for the global health community, with musculoskeletal conditions cited as one of the most common causes of chronic pain. Fibromyalgia (FM), a condition traditionally managed by rheumatologists, has also played a role in heightening this awareness and done much to elucidate pain mechanisms. In the absence of an imminent cure for rheumatic diseases, pain will continue to be a prevalent symptom impacting on quality of life and demanding attention.

Rheumatic pain is no longer classified as purely nociceptive in character, but has important neuropathic contributions. The essence of neuropathic mechanisms begins with a complex interaction of local factors at the periphery, modulation of the pain message by changes in the spinal cord and brain stem, altered function in the brain, and finally, effects mediated via the descending inhibitory system, with neurotransmitters such as serotonin and norepinephrine playing key roles.

Several lines of evidence strengthen the hypothesis of the interplay of neurogenic factors in rheumatic pain, including central sensitization in knee osteoarthritis (OA), hyperalgesia in locations of referred pain, and activation patterns in the brainstem in response to pain. Clinical support for neurogenic mechanisms is further provided by a Canadian focus group study of persons with OA, which reported that neuropathic pain descriptors were used by at least one third of patients. Functional magnetic resonance imaging (fMRI) has also demonstrated functional and structural changes in the brains of OA patients.

Translation of understanding of pain mechanisms into clinical care
How then will this new concept of pain mechanisms affect rheumatology patient care? Treatment options for our patients will therefore become more diverse to incorporate non-pharmacologic as well as pharmacologic strategies more commonly used to treat neuropathic pain. A logical step is to explore the use of adjuvant medications, drugs with primary effect on symptoms other than pain, with anticonvulsant and antidepressant medications representing the two major categories. The use of adjuvants is now common in the management of FM. Health Canada has approved both pregabalin and duloxetine for the treatment of FM, and duloxetine also for treatment of chronic low back pain. Adjuvants have the added advantage that they may address symptoms other than pain, such as sleep, mood, and even fatigue.

Challenges and controversies in rheumatic pain management
Rheumatologists may rightly be reticent about embracing these new concepts of pain management, thereby adding an extra dimension to patient care for doctors already struggling with long waiting lists and time constraints. We must question whether we are sufficiently knowledgeable to provide balanced recommendations regarding the panoply of non-pharmacologic and pharmacologic interventions in the management of chronic pain. It is possible that we suffer from a knowledge
deficit on these issues, as evidenced by a survey of Ontario rheumatologists. Antidepressants, sleep-enhancing treatments, anticonvulsants, and even opioid medications are mostly outside our comfort zone of prescribing. More importantly, patients may not be ready to be treated with these agents, taking into account the risk/benefit ratio from multiple perspectives.

A second area of challenge is evaluating the efficacy of an intervention for pain, which remains solely based on subjective patient reports. The statistically significant effect on pain, measured as a 2/10 point or 30% reduction may not truly reflect a clinically meaningful response. Reaching a state of mild pain is better than a reduction in pain which still leaves the patient with moderate pain and ongoing functional impairment. To quote Maxime Dougados, “It’s good to feel better but it’s better to feel good.” Another consideration is that features of the experience of pain and suffering, so important to the patient, may be less commonly addressed in routine clinical care. These may include low-grade night pain, which, while not causing conscious awakening may nevertheless be disruptive of sleep architecture, as well as the fear of harm in the setting of pain, and mood associations with chronic pain.

Even with these reservations and challenges, rheumatologists must become more actively involved in the management of rheumatic pain. For example, using pooled indices of disease activity in rheumatoid arthritis (RA), separating inflammatory from non-inflammatory pain is critical to effective and correct treatment. The momentum that has developed in the understanding and management of pain requires us to keep pace in order to remain effective doctors and advocates for our patients.

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References