

Guest Editorial

Neurogenic pain disorders

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As guest editor for this volume of *NeuroRehabilitation*, I am very honored to introduce this thematic issue on “Neurogenic pain disorders”. The articles in this issue provide an excellent and very timely review of several very important conditions that we as neurorehabilitation professionals often have as challenges in terms of both assessment and treatment.

The first article in this issue provides a comprehensive review of CRPS by Dr. Allison Kessler, and colleagues. As the authors appropriately note the diagnosis and treatment of this condition is often challenging as there is no one confirmatory test, and no one definitive treatment. Historical aspects of the condition are reviewed including classification in addition to epidemiology, staging and pathophysiology. The treatment section of this article provides recommendations on pharmacological, interventional pain management procedures, surgical intervention, neuro-modulatory techniques, psychological care as well as use of more conservative modalities.

The second article on peripheral neuropathic pain by Dr. Douglas Murphy and colleagues reviews clas-

sifications, pathoetiologies (including prognostication of each) and treatment interventions. The treatment intervention section covers pharmacological (enteral, topical and neurotoxin and cannabinoid agents), as well as interventional and neuro-modulatory techniques. A thoughtful discussion regarding therapeutic approaches to treatment of neuropathic pain follows and provides nicely laid out logic for addressing different types of neuropathic pain problems. The authors also provide some very helpful details, including tables delineating various treatment options.

The third article authored by Drs. Deena Hassaballa and Richard Harvey provides a comprehensive review of central pain syndromes. Although relatively uncommon, central pain is a very challenging clinical condition for neurorehabilitation clinicians and there are few current comprehensive reviews on the topic. The authors provide interesting historical information on the condition as well as a discussion of incidence, prevalence, and risk factors for the same. The pathophysiology of the disorder is discussed in detail. Assessment strategies are also reviewed including validated assessment methodologies relative to pain. Treatment approaches are discussed first in general terms and then specific treatment methodologies are reviewed. The article concludes with recommendations for future research.

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The fourth article by Dr. Sheryl Katta-Charles on craniofacial neuralgias provides a very nice article on a topic on which there is little consolidated current information in the medical literature. After a brief introduction and review of craniofacial anatomy, specific clinical conditions are reviewed. The aforementioned is followed by a discussion of treatment options including medications, interventional pain management procedures and surgical treatment relative to microvascular decompression or ablative procedures. Directions for future research are also delineated emphasizing the need for focus on sex-based factors that contribute to pain in gender based treatment strategies, the influence of craniofacial pain on functionality and psychoemotional status and treatment outcome measures.

Drs. Stover and Prahlow are authors of the fifth article on residual limb pain. This review is particularly important because of the prevalence of this condition and the projected number of individuals who will suffer from this disorder moving forward in time. Given that 25% to 50% of patients may have ongoing difficulties with residual limb pain or phantom pain/sensation, this review is of particular relevance to practitioners involved with post-amputation care. The etiology of the condition is discussed along with differentiation of underlying mechanisms involved in residual limb pain versus phantom limb pain/sensation. The authors review epidemiology, etiology, and treatment. The treatment section is divided/categorized based on causes and type of pain and provides an excellent overview of both the causes and the targeted treatment of each. Additional important comments are provided on the use and limitations of opiate therapy in addition to a brief discussion of mental health interventions in this patient population.

The second to last article by Dr. Dwyer and Zasler reviews the topic of posttraumatic cephalalgias (PTC). The area of posttraumatic cephalalgia remains controversial on a number of levels and the authors attempt to provide, in that context, an overview and discussion of current classification and limitations of same, epidemiology and risk factors for PTC, subtypes of PTC and associated pain generators, as well as pathophysiology. The clinical course of PTC as well as prognostic risk factors for pain persistence are also reviewed. The article then transitions into a discussion of clinical management and limitations of the existing literature germane to PTC.

The final article in this issue covers an important topic that is rarely discussed in neuro-rehabilitation pain literature and that is functional pain disorders. Dr. Popkirov and colleagues provide a very timely discussion of so-called nociplastic pain as a third mechanistic descriptor of pain arising primarily from alterations of neural processing contrast pain due to tissue damage leading to nociceptive feedback or neuropathic pain. The discussion also reviews current reframing of how functional pain disorders are classified and emphasizes the biopsychosocial nature of the condition. The need for multimodal treatment in selected pain syndromes are discussed including chronic back pain, fibromyalgia, CRPS, and pain in functional neurological disorders.

As the guest editor of this issue, I am very grateful to all the contributors and their high quality of work which will hopefully be appreciated by readers and advance knowledge in this area of neurorehabilitation.