



## HYPNOTHERAPY AND NEUROPATHIC PAIN

By Fred H. Janke & Sherry M. Hood

*Dr. Janke completed his medical education at the University of Calgary in 1982 and has been practicing in Sylvan Lake, Alberta as a family physician since 1984.*

*He became involved with the University of Alberta as site director in Red Deer for a new rural stream family medicine program in the year 2000. Since then he has become increasingly involved with teaching family medicine at the post-graduate level. He became the "Rural Program Director" for the Department of Family Medicine in 2008 and more recently, in October 2011, took on a broader position as "Director of Rural and Regional Health" for the Faculty of Medicine. Although he is full time faculty his clinical work remains in Sylvan Lake.*



*Sherry M. Hood is the founder, curriculum developer and head instructor for The Pacific Institute of Advanced Hypnotherapy in New Westminster, British Columbia where she teaches full time hypnotherapy courses.*

*In August 2009 Sherry was appointed Clinical Lecturer in the Department of Family Medicine, University of Alberta. Her hypnotherapy course became a medical elective for post graduate residents from The University of Alberta in December 2010. Sherry was awarded "Educator of The Year" in 2011 by The International Medical and Dental Hypnotherapy Association. A pilot study through the University of Alberta was conducted using Sherry's smoking cessation intervention. Sherry continues to work to bring hypnotherapy forward within the medical community. In 2014, Sherry became an "Allied Health Professional" within the College of Family Physicians of Canada.*

Neuropathic pain can be one of the most vexing painful experiences. The terms, neuropathic pain and neuropathy, are used to describe a discomfort induced by nerve irritation, inflammation, injury or even destruction. It is often characterized as stabbing (knife like), electric shock like or a burning lancinating pain. It can be caused by trauma including spinal cord injury and amputations, infections such as Herpes Zoster (shingles) and Guillain Barre Syndrome, nerve compression such as carpal tunnel syndrome, metabolic disturbances such as diabetic neuropathy or other nerve irritation such as Trigeminal Neuralgia. Cancer pain often manifests itself through neuropathic pain secondary to nerve involvement.

Traditional pharmaceutical approaches to neuropathic pain include analgesics (both non-opioid and opioid), anti-convulsants (such as gabapentin and pregabalin) and tricyclic antidepressants (such as amitriptyline and imipramine). Adjuvant medications include anxiolytics, muscle relaxants, topical treatments (anti-inflammatory gels) and Botox injections. Non-pharmacological approaches have included cognitive behavioural therapy and biofeedback. As well, neuromodulation such as TNS, spinal cord stimulation and deep brain stimulation are options for refractory pain. Sadly information resources often used by the medical profession make no mention of hypnotherapy as a treatment modality.

A literature search regarding the use of hypnosis for neuropathic pain has had to follow a variety of directions. There are some publications focusing on hypnosis and chronic pain in general but research studies are often

directed toward a specific condition such as spinal cord injury or post herpetic neuralgia. Much of the hypnotherapy literature regarding neuropathy is quite old, almost as if neuropathic pain has fallen off the radar of hypnotherapists or hypnotherapy has fallen off the radar of those conducting research in these conditions. This implies a huge potential for hypnotherapists to provide deeper experience and knowledge dissemination.

Recent advances in imaging technology have allowed a dramatic increase in understanding of the central neurophysiological correlates of pain. The experience of pain occurs through multiple integrated neurophysiological mechanisms with various brain sites playing a key role. Brain loci commonly linked with pain include the thalamus, the insula, the primary and secondary cortices, the anterior cingulate cortex and the prefrontal cortex.<sup>1</sup> Imaging studies related to hypnotic suggestion show changes in the same areas of the brain.<sup>2</sup> Woody and his colleagues have shown through imaging studies that hypnotherapy takes place in the same sites of the brain as real experiences, whereas imagined experiences take place in different areas.<sup>3</sup> Elkins and co-authors provide a review of thirteen prospective studies of hypnosis for the treatment of chronic pain.<sup>4</sup> The authors acknowledge lack of standardization of hypnotic interventions, low number of participants and lack of long term follow-up of patients as being a limitation of all of these studies. There have been only four randomized control trials of hypnotic analgesia for chronic pain published since 2005, all in 2008 and 2009.<sup>2</sup> The recent studies demonstrate that hypnosis was either as or more effective than

