The Australian Pain Society

2008
Distinguished Member Awards

Awarded for services to the promotion, treatment and science of pain management and lifelong contribution to the Australian Pain Society.
Professor Bogduk was the youngest medical practitioner amongst the founding members of the Australian Pain Society.

At the time, he was a PhD student in Jim Lance's Dept of Neurology at the University of NSW. His career in Pain Medicine however, started earlier; between 1974 and 1975, as a postgraduate student at Johns Hopkins Hospital, he participated in spinal cord stimulators and operant conditioning. He also worked with Norman Shealy who developed both spinal cord stimulation and facet denervation.

Throughout his career, Professor Bogduk’s work, while spearheading and underpinning, has at times refuted, the biomedical approach to spinal pain. His early work pursued the anatomical basis of spinal pain. These studies demonstrated the innervation of the intervertebral discs and the zygapophysial joints, which established these structures as possible sources of pain. These contributions to the study of Anatomy have at last been recognized. Consequently, for the first in 200 years, in the forthcoming edition of Gray’s Anatomy description of the spine, its muscles and innervation, has been totally overhauled.

Professor Bogduk’s later work addressed the way in which pain from the discs and joints of the vertebral column could be diagnosed and then treated. As a lecturer, and subsequently Reader in Anatomy at the University of Queensland, he served as an Honorary Medical Officer in Legh Atkinson’s Pain Clinic at the Princess Alexandra Hospital in Brisbane. There he undertook the early studies of diagnostic blocks for cervical and lumbar zygapophysial joint pain, and their treatment by radiofrequency neurotomy. Subsequently, at the University of Newcastle, Professor Bogduk’s students undertook seminal studies into the validation of diagnostic blocks and radiofrequency neurotomy. Those studies showed that an anatomical diagnosis of chronic neck pain could be achieved in some 60% of patients. His students performed the only double-blind, placebo controlled trial of spinal surgery for neck pain.

Radiofrequency neurotomy remains the only intervention for neck pain ever shown to be able to provide complete relief of chronic pain, in some 30% of patients. This work has left Professor Bogduk at the centre of continuing tensions over whether whiplash is an organic disorder or entirely a psychosocial one. With Australian and US colleagues, Professor Bogduk undertook studies into the sources of chronic low back pain. This work superintended the rise and subsequent fall of lumbar facet pain.

- Technical studies validated controlled, diagnostic blocks of the lumbar 2 joints
- Initial studies promoted these joints as possibly common causes of pain
- But subsequent studies have reduced the prevalence of lumbar 2 joint pain to miniscule

Other studies showed that sacroiliac joint pain could not be diagnosed by clinical examination, but could be diagnosed by controlled, diagnostic blocks. If are used, the sacroiliac joint accounts for some 15-20% of patients with chronic back pain. There is still not a validated treatment for this pain, but studies are emerging.

With respect to discogenic back pain, Professor Bogduk’s anatomy studies promoted the disc as a possible source of pain; his clinical studies indicated that it accounts for some 40% of chronic low back pain. Professor Bogduk has contributed to studies to validate discography, and the diagnosis of discogenic pain by MRI. That field still remains contentious. Meanwhile, in the past and currently, he has been involved in studies of minimally invasive treatments for discogenic back pain. In that regard, he provides clinical services only and strictly, under the auspices of ethics approved clinical trials.

As an academic, Professor Bogduk has published over 200 refereed papers, and 120 chapters to books on spinal pain and headache. Of late, he has published chapters on neck pain and back pain in the Handbook of Clinical Neurology, and the definitive chapter on cervicogenic headache in Wolff’s Textbook of Headache. His books on Clinical Anatomy, on Neck Pain, on Back Pain, and on Biomechanics of the Lumbar Spine have variously been translated into German, Japanese, French, and Chinese. As Deputy Editor of the IASP Classification of Chronic Pain, he was responsible for revising the entire section on spinal pain. That monograph has now been translated into Polish, Italian, and Chinese.

In his later career, Professor Bogduk has championed evidence-based practice. As Director of the National Musculoskeletal Medicine Initiative, he developed and tested evidence-based guidelines for the treatment of Acute Musculoskeletal Pain. In his own Area Health Service, studies have shown that practice according to guidelines can virtually all but eliminate workers compensation claims. Otherwise, Professor Bogduk has promoted evidence-based practice for needle procedures for spinal pain, and has edited the Practice Guidelines of the International Spine Intervention Society.

Professor Bogduk’s work has not been popular, either within or outside the world of needle jockeys and surgeons. He has adhered to precepts instilled by Professor Lance, which were to produce the evidence, and to follow the evidence. In Spine Science, the evidence that has emerged has not always favoured the establishment, and has frequently challenged it.

Manual Medicine practitioners have not liked being told that their physical examination and treatments do not work. Anaesthesiologists have not liked being told that their blocks are not valid, or that their treatments do not work. Surgeons have not liked being told that fusion does not work. The truth, however, is not designed to make practitioners feel good. The truth is to serve the patients. It is for the benefit of patients, not the satisfaction of peers, that Professor Bogduk has published his work.

During his career, Professor Bogduk’s research has been recognized with Prizes from the Cervical Spine Research Society, the Spine Society of Australia, and the North American Spine Society. His students have been honoured by the IASP, the Australian Rheumatology Association, and the Australian New Zealand College of Anaesthetists. Professor Bogduk completed an MD, and was awarded a DSc for his research. Yet, as a Professor, he still made time to complete the Diploma in Pain Medicine, with other students, and later the Master of Medicine, in Pain Management. In the twilight of his career, he and his wife are training to become rangers for wildlife sanctuaries in outback Australia.

When people speak of notable achievements in Australian Pain Medicine, they often refer to “…and others”. Professor Bogduk has been those “others”.