Vancouver MD develops acupuncture therapy

Chronic pain alleviated with new technique

By Barbara Kermode-Scott

CALGARY – Dr. C. Chan Gunn could easily be taken for a missionary when he talks about intramuscular stimulation, an enhanced acupuncture technique he developed to treat pain.

Certainly, he has a following.

When he travelled here recently to share his experience at the University of Calgary Sport Medicine Centre, in the audience were physicians and physiotherapists from across Canada, U.S., Europe and South America. Medical students and physicians from around the world have also visited him at his Institute for the Study and Treatment of Pain (ISTOP) in Vancouver, he said.

He was invited to speak in Calgary by physiotherapist Lorrie Maffey and some local doctors.

"Dr. Gunn invited myself and Dr. Allen Hooper to start teaching Gunn intramuscular stimulation to other physiotherapists and physicians, something that ISTOP has been doing in Vancouver for years," Maffey said.

"Together, we decided to host a course here and share the 'good news' with the participants," said Maffey, who works out of the sport medicine centre.

Maffey, a member of the Canadian Medical Team treating injured Canadian athletes at the Winter Olympics in Salt Lake City, learned about intramuscular stimulation at a course in Toronto a few years ago. Since then, she and two others at the centre have been using the therapy as an adjunct for physiotherapy on some patients.

"We embrace any evidence-based techniques available for patients at the centre and have found this researched technique particularly useful," she told the *Medical Post*.

While Dr. Gunn's chronic pain treatment is recognized, taught and practised worldwide, it isn't widely available in Canada.

Dr. Derrick Thompson, a Calgary specialist in internal medicine who attended the seminar, said Dr. Gunn's methods would be a worthwhile model to develop.

"There's a growing science around the electrical activities in muscles that relate to pain syndromes," said Dr. Thompson, a clinical associate professor with a conjoint appointment in the faculties of medicine and kinesiology at the university here.

"Dr. Gunn's ideas are being used by more and more clinicians, certainly in the Calgary area and in our chronic pain group. His ideas overlap with the same types of treatments we do using the theory of myofascial pain syndromes.

"At the Calgary Chronic Pain Clinic there are lots of physiotherapists and now more physicians looking at Dr. Gunn's concept of inserting needles into the areas where the muscles are painful to help relieve people's muscular pain syndromes."

ISTOP, the Vancouver clinic founded by Dr. Gunn in 1995, specializes in the study and treatment of soft tissue pain, and sees about 1,000 patients annually. The patients come from around the world (self-referred or referred by physicians) to seek help for intractable pain. Most have been ill for some time.
Dr. Gunn said intramuscular stimulation is a comprehensive system of diagnosis and treatment using objective, clinical signs to dictate step-by-step treatment of neuropathic nerves in shortened muscle.

He said it has alleviated neuropathic or radiculopathic pain in patients with common persistent pain problems such as backache, whiplash, tennis elbow, neuralgia, hip pain, headache and frozen shoulder. It desensitizes the pain by relieving irritation at its source, typically at the nerve root, he explained.

In a retrospective review of 43 patients (Journal of Musculoskeletal Pain, Vol 9(2) 2001), Dr. Gunn and colleagues reported findings for intramuscular stimulation treatment of whiplash disorders. The patients had pain and abnormal physical signs (allodynia, trophedema, muscle knots and limited range of motion).

With treatment, 29 of the 43 patients achieved long-term improvement. Most of the 43 improved subjectively and their abnormal physical signs resolved.

Dr. Gunn treats the subtle dysfunctions in the nervous system that cause pain by stimulating the nerves within the muscles. Affected muscles become shortened, and this shortening physically compounds pain, he said.

It's critical to relieve the muscle tension and shortening, he said. This is achieved by stimulating the muscles using a very thin acupuncture needle. Dr. Gunn gave practical demonstrations of the therapy on volunteers.

"Most of the people we see have nerve dysfunction," said Dr. Gunn. "They have been treated wrongly. I haven't had a patient treated by surgery for the last 25 years.

"Pain is always regarded as a consequence of injury," he told the Medical Post during a break at the seminar.

"You don't have to have an injury to have pain. Pain can come from a dysfunction of a nerve. It can be intrinsic pain. There's a shortage of energy. This produces the pain."

While some patients are frightened by the needle, he said they are reassured when they understand how thin it is, and that the therapy isn't painful if used correctly.

Some problems, like shin splints, can be treated almost instantly, he said. Other problems may require a series of treatments.

If the muscle is shortened and supersensitive, however, the muscle can cramp when the needle is inserted at the trigger point. The cramp lasts only a minute or so, and then the muscle relaxes.

Dr. Gunn, a Chinese Malaysian by birth, is a clinical professor at the Multidisciplinary Pain Centre at the University of Washington's school of medicine in Seattle. He studied Western medicine long before he became interested in acupuncture in the 1970s. He graduated from Cambridge University in 1950 and worked in several U.K. hospitals before practising family medicine in Malaysia for nine years. In 1966, he immigrated to Canada.

He was a member of the medical staff of the Workers' Compensation Board rehabilitation clinic in Vancouver until 1980, dealing with many different types of pain. During the 1970s, Dr. Gunn became interested in acupuncture and developed intramuscular stimulation.

In 2001, he was named to the Order of British Columbia and the Order of Canada.