

Pinpointing

PAIN

RELIEF FOR
CHRONIC
SUFFERERS

A new understanding of chronic pain has led to a breakthrough in treatment for myofascial disorders.

There are few things more frustrating than being labelled a hypochondriac or malingerer if you are in genuine pain. Those with fibromyalgia, whiplash, or other invisible forms of pain will know the feeling. Doctors are often perplexed by such conditions and cannot offer any relief. Unable to find any evidence of the pain, they often conclude that the patient is suffering from some psychosomatic illness, or is simply imagining or faking it.

Dr Chan Gunn, an honorary Fellow at Cambridge, and clinical professor at the University of Washington's Multi-disciplinary Pain Centre in Seattle, is an expert at helping patients with the kinds of pain which exhibit no obvious physical signs. He was hired by the Workers' Compensation Board to help those patients who could sometimes be wrongly suspected of falsely claiming compensation. After 15 years in this position, he emerged with a very different view of the nature of pain. "True malingerers are extremely rare," he

minor irritation or tension, they become extremely sensitive and cause muscle shortening. This produces pain by pulling on tendons, straining them as well as distressing the joints they move. Muscle shortening also increases wear and tear and contributes to degenerative conditions such as tendinitis, osteoarthritis and spondylosis (degeneration of the spine). These conditions further irritate the nerve root, aggravating neuropathy and muscle shortening.

Amy Gill is a typical example of how doctors treat those suffering from neuropathic pain. Diagnosed with spondylosis, she was told that nothing could be done to relieve the pain and numbness she was experiencing in her lower back and legs. "I could not work, and found it very painful to stand or walk around," says Gill. "The doctors told me that they might be able to operate in a few year's time, when the degeneration had become really severe, but basically there was nothing they could do for me. My active lifestyle came to an end and I was in constant pain."

There are three kinds of pain.

says, "and it has taken me years to understand that our approach to pain is completely wrong."

What Dr Gunn discovered was that about 10% of patients developed chronic pain. They usually suffer from tender points on the body, detectable only through physical palpation. Many of these points corresponded to acupuncture points, and were generally located where nerves entered muscles. Through his studies of medical acupuncture and countless cases of chronic, medically-unidentifiable pain, Dr Gunn began to realize that patients without clinical symptoms had chronic pain due to abnormally heightened sensitivity of the nervous system, caused by irritable nerves. His theories were based on the research of Dr Walter Cannon, who, in the 30s and 40s, proposed a Law of Supersensitivity, whereby the body's structures—including muscles—can become hyperactive and supersensitive when deprived of stimulating impulses delivered via the nerves.

Cannon also identified the 'fight or flight' syndrome which describes how our nervous system is designed to respond with immediacy for a 'Jurassic Park'-type lifestyle. But since we no longer can react to acutely stressful situations with an

Gill was fortunate to hear about the Gunn Pain Clinic (established two years ago), and began treatment with Dr Gunn in 1997. Within a matter of months, her pain and numbness had disappeared and her flexibility was returning. Now, almost two years later, she is back at work and fully active once again.

The IMS process involves inserting an acupuncture needle into the belly of a shortened muscle. "To relieve the nerve, we need to introduce a supply of energy," says Dr Gunn. "This energy is what feeds the

nerve—and what the Chinese refer to as *chi*. Without it, the nerve becomes atrophied (from *a-trophis*), which literally means *without food*. When the needle is inserted into the muscle, it generates an electrical charge, called the current of injury, which comes from within the muscle itself, stimulating a release of energy and promoting healing."

Healing follows because of the release of platelets in response to local inflammation caused by the insertion of the needle.

instant physical response, the stress and tension build up in our nervous system. This causes pressure, which leads to supersensitivity and muscle shortening.

Straddling the divide between conventional western medicine and traditional Chinese acupuncture, Dr Gunn has developed his own approach to chronic pain produced by heightened sensitivity. His technique, called intra-muscular stimulation (IMS), is a form of dry needling involving the use of fine acupuncture needles to stimulate muscles and nerves. He refers to this type of pain as neuropathic pain—the pain produced by irritable nerves.

"What most doctors don't realize is that there are three kinds of pain," says Dr Gunn. "The first is on-going nociception or inflammation, which means a constant source of physical injury or tissue damage caused by an outside force, such as repeated slaps to the face; the second is psychogenic, which relates to pain following psychological disorders; and the third is neuropathic pain, which is the result of an abnormally sensitive nervous system. But since most doctors are not even aware of the existence of this third category of pain, they do not know how to identify or treat it."

When nerves malfunction due to

Above photo: Dr Gunn uses intra-muscular stimulation to relieve chronic pain. PHOTO: OLGA SHEEAN

The platelets, in turn, release the platelet-derived-growth-factor (PDGF), which promotes healing. This process is a necessary prelude to healing, says Gunn, and conditions such as fibromyalgia (which is not an immunological disorder, as commonly thought), cannot heal without it.

The needle is inserted past the skin's pain-sensitive layer into the muscle. The stimulated muscle goes into spasm and grabs the needle which it then gradually releases as the pressure on the nerve is released. "When the needle is grabbed in this way, you know the patient is in genuine pain," says Dr Gunn. "When there is no neuropathy, there is no grabbing of the needle by the muscle, and no pain experienced in the process."

Chronic pain following whiplash is another form of neuropathy which can be very successfully treated by IMS. "With this approach, we can catch degeneration in the very early stages," says Dr Gunn, "saving injured individuals a great deal of pain, frustration—and unnecessary surgery. It would also, incidentally, save the WCB and ICBC (Insurance Company of British Columbia) a fortune."

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