



EMP

Newsletter of the East End Multidisciplinary Pain Management Program

EMP Newsletter

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Program News

Patients treated at **The East End Multidisciplinary Pain Management Program (EMP)** are referred by physicians, the WSIB, insurance providers, rehabilitation counsellors, other allied health service providers, lawyers and paralegal counsellors. The program provides assessment to physicians and to other referring sources under section 24 of the S.A.B.S. (Statutory Accident Benefits Schedule).

Treatment recommendations are provided. Where appropriate, OCF-18/59 treatment plans are completed and submitted on behalf of patients. The **EMP** offers the following treatment programs:

- 1 Eleven week multidisciplinary pain management program. This program provides over 100 hours of treatment utilizing a cognitive behavioural approach in the management of chronic pain. The program meets the standards for evidence based treatment. It has a strong research component, having collected outcome data since its inception in 1998.
- 2 Individualized programs involving:
 - a Specialized physiotherapy. The program physiotherapist has been involved in the treatment of patients with chronic pain for over twelve years. This therapist uses modalities that are specific to the treatment of patients with chronic pain. These modalities include: acupuncture; biofeedback; and one-to-one cognitive behavioural therapy that is goal directed.
 - b Psychotherapy. The program social worker has many years of experience in outpatient psychiatry. Modalities of treatment include: IPT (Interpersonal

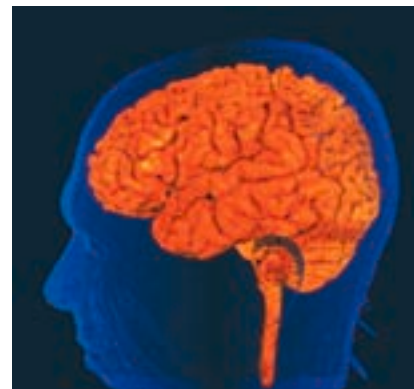
Therapy); cognitive behavioural therapy; brief focussed goal directed therapy; family therapy; marital therapy; and grief counselling.

- c Specialized occupational therapy. The program occupational therapist has many years of experience in the field of pain management. She is able to help patients implement the goals of functional reactivation in their homes and workplace. Where appropriate vocational re-entry goals are a central part of treatment.
- d Nutritional counselling. The program nutritionist is available to provide patients with education and counselling in order to meet their nutritional goals. For many patients, chronic pain is often associated with negative changes in eating habits and body image, and medication induced weight gain that can further impair their ability to increase their level of function.
- e Psychiatry. The program psychiatrist has subspecialty training in the treatment of patients with chronic pain. He is a member of The Canadian Pain Society Task Force that developed the national consensus statement and guidelines for the use of opioids in the treatment of non-cancer pain. Dr. Ennis can provide a diagnostic assessment, as well as pharmacologic and non-pharmacologic treatment input for the management of patients with chronic pain. His work has been publicized in the media.

Please download a recent program schedule to gain a more detailed understanding of the pain program's group program.

Web Sites: Complex Pain Pathways

In undergraduate medicine, most future physicians are taught that pain sensations travel along sensory nerves to the *dorsal root sensory ganglion* and then enter the *spinal cord*. The signal crosses to the contralateral side of the cord, up the *lateral spinothalamic tract* to the *ventral posterolateral nucleus* of the *thalamus*. From the thalamus, the signal travels up to and through the *internal capsule* to the *postcentral gyrus* of the *cerebral cortex*. It is difficult enough to try and remember this complex pathway. However, current research suggests that the 'neuro-anatomy' of pain is far more complex than anyone could have imagined. The processing of pain signals involves widespread areas of the central nervous system. This point is well illustrated in the website at <http://www.wfubmc.edu/nba/faculty/coghill/coghill.html>, organized by Robert C. Coghill, Ph.D. The site contains film that helps to illustrate the author's points.



Today in research: The **DREAM** Gene

Researchers in Toronto have discovered a genetic mechanism involved in pain modulation that could lead to an entirely new approach to pain control. The results of their research are published in the January 2002 issue of the Journal *Cell*.

In the study, genetically engineered mice lacking a gene called *DREAM* (Downstream Regulatory Element Antagonistic Modulator) showed a dramatic loss of pain sensitivity compared to mice who had the *DREAM* gene.

DREAM suppresses the production of dynorphin, an endogenous opioid, which is typically produced in response to pain and stress. When the *DREAM* gene was absent in mice, the researchers discovered increased production of dynorphin and a decreased sensitivity to acute, inflammatory and neuropathic pain in the subject mice. These mice did not become addicted to the dynorphin. Michael Salter, MD, PhD, Director of the University of Toronto Centre for the Study of Pain and coauthor of the study stated that "The fact that even mice with neuropathic pain-the kind of sharp, chronic pain resulting from nerve injury-experienced this effect is exciting because the medical community currently doesn't have any widely effective treatments for this debilitating type of pain."

Current approaches to pain management focus on drugs such as morphine that stimulate cell endorphin receptors. Dr. Salter says that "these findings point to a novel pharmacological approach to pain management where researchers will be looking for drugs that could block the ability of *DREAM* to bind to DNA or simply prevent the production of *DREAM*," and thereby increase the endogenous production of dynorphin.

References

Cheng, H.-Y. M. et al. *DREAM* is a critical transcriptional repressor for pain modulation. *Cell*; 2002, 108:31 - 43.



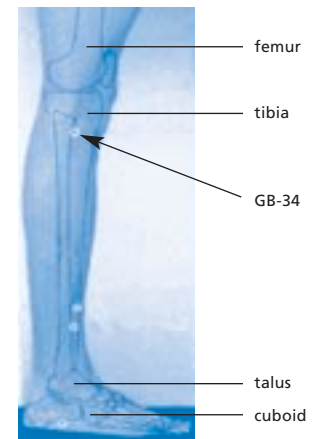
Acupressure – The Yanglingquan Point

Acupuncture is one of the treatment modalities used at the **East End Multidisciplinary Pain Management Program**. Acupuncture points are taught to patients in our group program, during the acupressure session. In our last issue of *EMP*, the LI4 point was reviewed. In this edition you will learn about **GB-34** or the **Yanglingquan** point.

Location: **GB-34** is located on the lateral side of the leg, in a depression anterior and inferior to the head of the fibula. This insertion site coincides with the point used for a peroneal nerve block. If it is located correctly, this point is tender to the touch.

Benefit: The **Yanglingquan** point reduces pain related to arthritis and arthralgia.

Method: Firmly press into the depression, anterior and inferior to the head of the fibula. If a bit of pain is felt, radiating down the lateral aspect of the leg, you have found the right spot. Apply pressure for about 30 seconds.



Painful Facts:

This column is devoted to information about pharmacologic and nonpharmacologic treatment modalities, used to improve the quality of life of patients with chronic pain.

A recent systematic review completed by Guzmán and colleagues¹, examined the literature on control trials for the treatment of chronic low back pain using multidisciplinary pain programs as the active treatment component.

Ten studies met inclusion, resulting in 12 randomized treatment trials, comparing multidisciplinary rehabilitation and control groups. Programs involved either intensive treatment, with over 100 hours of therapy, or programs with less than 30 hours of therapy.

The authors concluded that compared to control groups, intensive (over 100 hours of treatment) multidisciplinary functional restoration pain programs:

- 1 Improve function (strong evidence)
- 2 Reduce pain (moderate evidence)
- 3 There is contradictory evidence regarding vocational outcomes.

This study supports the treatment of chronic low-back pain in intensive (greater than 100 hours of treatment) multidisciplinary pain programs.

¹ Guzmán J, Esmail R, Karjalainen K, Malmivaara A, Irvin E, Bombardier C: "Multidisciplinary Rehabilitation for Chronic Low-Back Pain: Systematic Review". *British Medical Journal* 2001, **322** (26) 6: 1511-1516

Contact Info

Visit our website at <http://www.eastendpainclinic.com>

The site contains detailed information about EMP, and important resources for clinicians.

Contact us at:

Dr. Jeff Ennis
c/o The East End
Multidisciplinary Pain
Management Program

Located within:

St. Joseph's Healthcare
Centre for Ambulatory Health Services
2757 King Street East
Hamilton, Ontario L8G 5E4

Tel: **905-627-7300**
Fax: **905-627-4757**
email: **eastendpainclinic@cogeco.ca**