

Physiotherapy Times

An update into physiotherapy research from the rehabilitation professionals at



South City Physiotherapy & Manual Concepts Physiotherapy



Volume 2, Issue 2

October 2007

Director's Message – Fall 2007

From Francine Doré, Clinic Director

As mentioned in our last news letter, after years of steady growth, **South City Physiotherapy** is on the move. Our plan to open **Manual Concepts Physiotherapy** is now reality – (though a planned February opening stretched to April 16th).

Located in **Westminster Square** beside the new Guelph Library (at the corner of Farley and Clair in South Guelph), **Manual Concepts** has now been opened for several months. With a strong focus on manipulative & manual therapy and specialized Intramuscular Stimulation (IMS) treatment, **Manual Concepts** is filling an important need for services in south Guelph.

From a start with two Physiotherapists and six treatment rooms, **Manual Concepts** has already had to expand – adding a Physiotherapist, a Massage Therapist and a treatment room.

Through all the excitement at Manual Concepts, **South City Physiotherapy's** primary clinic has been steadily growing as well. Even with the return of **Heidi Caputo** and **Jeanette O'Brien** from maternity leaves, we've had to add another Physiotherapist to our team. **Craig Brown** MSc.P.T. joined **South City** Oct. 16/07.

South City Physiotherapy and **Manual Concepts Physiotherapy** will continue to grow in response to Guelph's need for patient services.

We are totally committed to providing professional, effective therapies and contributing in a vital and significant way to health care and health care delivery – while exceeding the expectations of the medical community.

Please contact Francine Doré for more information about our facilities and services at:

Phone: 519-763-2885

Email: francine@southcityphysio.com

Web Site: www.southcityphysio.com

Staff Profiles

Meet our Health Care Practitioners



Jennifer McKay - Physiotherapist

Jennifer is the newest addition to Manual Concepts Physiotherapy. She is a graduate of the

University of Waterloo where she did her Honours degree in Kinesiology (2001). After graduating from the University of Waterloo, Jennifer went on to obtain her Bachelor of Science in Physical Therapy from Queen's University in Kingston. Jennifer has been working as a physiotherapist for the past three and a half years in her hometown of Acton. Over the past few years, she has focused on completing courses in acupuncture, McKenzie training, as well as courses in manual therapy. Jennifer completed her Part A Manual Therapy exams in April 2007, giving her a certificate in Intermediate Manual and Manipulative Therapy. She is currently working towards her acupuncture certification. Her clinical areas of interest include the shoulder and the ankle.



Robin Young – Kinesiologist

Prior to joining South City Physiotherapy in 2001, Robin obtained an Honours BSc. degree

in Human Kinetics from the University of Guelph. Following university, Robin decided to share her knowledge of human movements and solidified her standing in the health and wellness field as a certified Kinesiologist. Since joining South City Physiotherapy, Robin has completed dozens of courses that continue to expand her base of knowledge. She enjoys educating patients on ways they can help themselves.

Robin is motivated to continue to learn and grow in every way possible - as part of the rehabilitation team at South City Physiotherapy.

Robin is currently enrolled in the fifth and final year of the Osteopathy program at the Canadian College of Osteopathy in Toronto, and is looking forward to transitioning from Kinesiology to a full-time Osteopathy practice in the very near future.

What a PAIN!!!

“Pain” is one of the most common complaints patients bring to a physiotherapist, with those experiencing pain always wanting it reduced or eliminated. It is important to understand that pain is a real and complex personal experience. The more knowledge and less fear an individual has regarding their own personal pain, the better equipped they will be to achieve their pain reduction goals.

Here are a few truths about pain that are critical to “getting well” – in this case reducing pain and maximizing function.....

1. Pain is all in your head! The brain is the final processing center that decides if something is painful or not. Here’s how it happens. We have sensors in our tissues (muscle, ligaments, and bone) which can sense mechanical, temperature and chemical changes. When the stimulus is sufficient, a signal (or impulse) is sent through our nerves to the spinal cord through the **peripheral system**^{1,3}.

If the signals reaching the spinal chord are strong enough, the information travels from the spinal cord to the brain (or cortex) through the **central mechanism** (The central mechanism includes the spinal chord, medulla, midbrain, thalamus, hypothalamus, and limbic system^{1,3}.) Different parts of the central mechanism have different roles to play in how signals are received and processed, and how pain is recognized and measured. For example, the thalamus is the first area for pain recognition and the hypothalamus is important for maintaining homeostasis and is rich in endorphin and opioid receptors^{1,3}. While we have dramatically simplified what is in fact a very complex process, the simple truth is that ultimately it is the brain that decides when you are in pain, and how bad it is. (See Diagram 1)

2. The amount of pain you experience does not relate to tissue damage^{1,3}. The common expression “Hurt does not equal harm” can be very true when relating pain to tissue damage. Good examples of this can be found by contrasting accident victims who experience little if any pain in spite of massive tissue damage and others who experience debilitating pain with no evidence of bone or tissue damage. There can be many reasons for this, but one is how, in the peripheral system, painful threats can be amplified by our own body chemistry (neuropeptides), causing more receptors to activate and send stronger signals to the central mechanism, leaving us to perceive more pain^{1,3}!

3. Pain involves the context of your experiences, memories, reasoning, beliefs, and emotions. We now know pain is recognized by the brain, however how an individual perceives a situation can influence the degree to which the central mechanism is excited, and consequently how much pain is experienced. So, negative thoughts, attitudes, anger, stress and depression can all contribute to the perception of pain symptoms^{1,2,3}.

4. “Chronic pain” is not a purposeful or “helpful” pain. Chronic pain can be defined as persistent pain lasting more than 6 months^{1,3,4}. However, it may be better to define chronic pain as an individual experience¹. Acute pain warns your body of injury or harm but chronic pain is a result of a sensitive or up-regulated peripheral and central mechanism. There are also many other physiological factors that affect chronic pain including the endocrine system (hypothalamus, adrenal glands), sympathetic/parasympathetic system, and immune system¹. For example, when the brain receives threatening information the hypothalamus releases hormones (ACTH) which leads to the release of cortisol from the adrenal glands. Cortisol is a stress hormone which protects us when we are challenged¹. (However, persistent cortisol can result in memory loss, depression, slower healing and reduced physical abilities.)

For these reasons, the treatment of pain requires a multi-dimensional approach. Overall, if the perceived threat of pain to the brain is reduced, we can get much closer to achieving normal function. Your physiotherapist is a valuable resource in this area. Physiotherapy can address the very important areas of exercise and education. Not only does exercise improve the health of the muscles and joints; it also establishes and re-establishes good connections between your body and your brain. Education is a regular part of your interaction with your physiotherapist. Through education about pain mechanisms physiotherapists can place a measure of situational control back in the hands of patients. A review of personal pacing, coping, relaxation strategies and a plan for coping with potential flare-ups are all essential elements of a pain management program. Manual therapy, or hands on skills also help reduce painful signals and improve inputs into the peripheral and central mechanisms. And finally, a powerful strategy, don't forget to laugh! This simple pleasure boosts endorphins and brightens your day!

The Pain Mechanism...

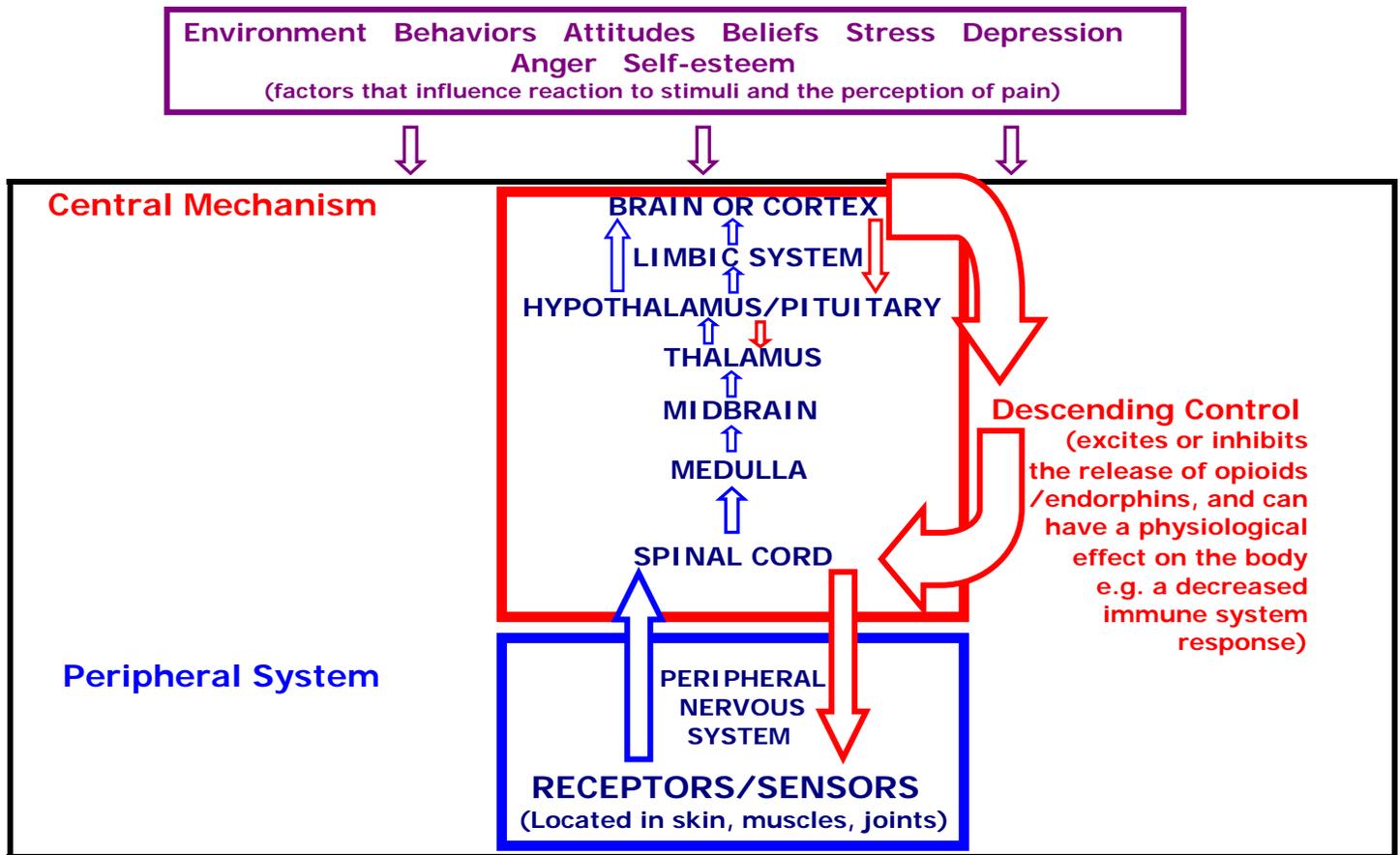


Diagram 1

Footnotes:

1. Butler, D., Mosely, L. (2003). Explain Pain. Adelaide, : Noigroup Publications.
2. Kachur, S., Carleton, R., Asmundson, G. (March/April 2007). "Fear-anxiety-avoidance model of chronic pain: A brief Review. Orthopedic Division Review, 28-31.
3. Patterson, D. (2004) Chronic Pain, Part One, Workbook.
4. Steinfeld, S. (Nov/Dec 2005) "Therapeutic education and the chronic pain patient " Orthopedic Division Review, 41-42.

Clinic News



Manual Concepts Physiotherapy

Partners **Scott Whitmore** and **Francine Doré** are pleased to announce the addition of Physiotherapist **Jennifer McKay**, and Massage Therapist **Johanna Thackwray** to the Manual Concepts team.

- **Jennifer McKay**, Physiotherapist
Jennifer is a graduate of Queen's University, and is an experienced and accomplished physiotherapist with clinic management experience. Jennifer has also completed her diploma in Intermediate Manual & Manipulative Therapy.
- **Johanna Thackwray** – RMT
Johanna is a level III Certified Sport Massage Therapist. In addition to her clinical experience, Johanna brings to Manual Concepts extensive experience working with national level athletes.
- **Lisa Carlesso**, senior staff physiotherapist at Manual Concepts is taking time out of her busy schedule to teach in the Physiotherapy Program at McMaster University.



South City Physiotherapy

- Welcome back Physiotherapist / Osteopath **Heidi Caputo**, and Physiotherapist **Jeanette O'Brien** who have been on maternity leaves.
- Congratulations to Physiotherapist **Veronique Girard** & husband who are expecting their 1st child in the new year.
- A big thank you to our "Run for the Cure" participants and sponsors.
- Congratulations to Physiotherapist **Monique Muller** on being admitted into the Clinical Science in Manipulative Therapy - Master's Program at the University of Western Ont.
- Congratulations to Physiotherapist / Osteopath **Heidi Caputo** on the successful presentation of her Thesis, and completion of her Osteopath training.
- Welcome aboard **Craig Brown** MSc.P.T. who joined South City Oct. 16/07.
- Congratulations to **Craig Brown** on completion of his Acupuncture Certification from the Acupuncture Foundation of Canada Inst.

Clinic Hours and Services



Manual Concepts Physiotherapy

Services

- Post MVA programs
- Intramuscular Stimulation (IMS)
- Work injury rehabilitation
- Sports physiotherapy
- Acupuncture
- Massage Therapy
- Manual Therapy

Hours:

Mon, Wed & Thur. 12:00pm – 8:00pm
Tuesday & Friday 8:00am – 3:00pm

Typical Conditions Treated

- Musculoskeletal pain syndromes including tendonitis, bursitis, fasciitis, sprains & strains
- Sports injuries
- Repetitive strain injuries including carpal tunnel syndrome, deQuervain's and tennis elbow
- Neck & back pain
- Postural dysfunctions
- Arthritis & degenerative conditions
- Handicapped Access
- Ample Free Parking



Manual Concepts Physiotherapy

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Guelph, ON N1L 0B7**

Phone: 519.766.7774 Fax: 519.766.9687

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South City Physiotherapy

Services

- Post MVA programs
- Work injury rehabilitation
- Sports physiotherapy
- Fitness assessments & programs
- TMJ treatment programs
- BPPV treatment programs
- Acupuncture
- Massage Therapy
- Pedorthic services & Orthotics
- Functional Abilities Evaluations
- Urinary Incontinence
- Manual Therapy
- Osteopathic treatments

Hours:

Monday – Thursday 7:00am – 8:00pm
Friday 8:00am – 3:00pm

Typical Conditions Treated

- Musculoskeletal pain syndromes including tendonitis, bursitis, fasciitis, sprains & strains
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