

Physiotherapy Times

An update into physiotherapy research from the rehabilitation professionals at



South City Physiotherapy & Manual Concepts Physiotherapy

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Director's Message—Spring 2009



Francine Doré B.Sc. P.T., CAFCI, CGIMS Registered Physiotherapist Clinic Director

A stethoscope..... does not a doctor make!

It is often said that "imitation is the subtlest form of flattery". If that's true, physiotherapists have reason to be very flattered of late.

It seems more and more "allied health practitioners" are acquiring clinical equipment commonly used by physiotherapists, and advertising that they can now provide "physiotherapy services" - in spite of the fact that they have no physiotherapy training or credentials.

Physiotherapy is a very powerful tool that can provide tremendous benefit to many patients—but it is only effective when administered by fully trained, certified professionals.

Registered Physiotherapists are well educated, well trained professionals who constantly upgrade their skills and knowledge with (what seems to us like an endless stream of) post-graduate courses. Course material includes (but is not limited to) mobilization / manipulation techniques, acupuncture, and Intramuscular Stimulation (IMS). The techniques covered in these courses have been proven effective for various conditions, when administered by qualified professionals. For this reason, these courses are usually only offered to physiotherapists.

We must be careful to ensure that patients don't end up in the hands of those offering services they are untrained and unqualified to provide. So, the next time you refer a patient for physiotherapy, make sure the clinic you refer to doesn't just have physiotherapy equipment, but that it is also staffed by Registered Physiotherapists who are trained and qualified to deliver physiotherapy services. After all, having physiotherapy equipment does no more to make one a physiotherapist—than having a stethoscope makes one a doctor!

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

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Staff Profiles

Meet our Health Care Practitioners



Judy Hettinga B.H.Sc., M.Sc. P.T. Registered Physiotherapist South City Physiotherapy

Judy graduated from the University of Western Ontario in 2006 with an Honours degree in Health Sciences, specializing in rural health issues. She went on to complete her Master's of Science in Physical Therapy from Queen's University in 2008.

Judy has an interest in orthopaedic physiotherapy and plans to enhance her skills by taking more post-graduate courses. She is particularly interested in pursuing her certification in manual and manipulative physiotherapy and her acupuncture accreditation.

Judy currently also works outside of the clinic in various nursing and retirement homes in and around Guelph.



Jeanine Marsh RMT
Registered Massage Therapist
Manual Concepts Physiotherapy

The newest member of the Manual Concepts Physiotherapy team is Jeanine Marsh, a Massage Therapist Registered with the College of Massage Therapists of Ontario since 2008. Jeanine is very eager and enthused about taking her recent education and applying it to the clinic. Jeanine is outgoing and excited to be a part of our excellent and knowledgeable staff.

Jeanine is always looking to learn and excel in whatever comes her way. She is always there to help her patients work towards successful outcomes.

Jeanine's approach to Massage Therapy is therapeutic with a focus on rehabilitation and recovery.

Evidence Based Treatment of Mechanical Neck Dysfunction

By Michelle Fraser B.Sc. P.T., FCAMT,

Mechanical neck dysfunction is one of the most frequently treated conditions treated by physiotherapists. This condition may be the result of postural dysfunction, trauma such as an MVA, or it may be of insidious onset. Symptoms include pain, limited range of motion, radiculopathy and cervicogenic headaches.

The trend in physiotherapy has been towards evidence based practice. Recently (2004, 2007) a group of researchers with the Cochrane Collaboration and the Cervical Overview Group based at McMaster University in Hamilton performed a systematic review of the literature. They have described what research shows to be effective physiotherapy treatment for mechanical neck dysfunction.

The best treatment is multimodal treatment

Both systematic reviews found that the most beneficial treatment for subacute or chronic mechanical neck dysfunction is a multimodal treatment approach of exercise plus mobilization and/or manipulation. Treatment effects were pain relief, increased functional abilities, and a strong global perceived effect of treatment (GPE). This was true for clients who did and did not experience cervicogenic headaches as part of their condition.

Manipulation and/or mobilization alone or combined with other types of treatment was found to be less effective for the treatment of mechanical neck disorders (1,2). Treatment techniques which were shown to have a strong or moderate treatment effect are summarized in the tables below.

In these tables, acute is defined as <30 days, subacute is 30-90 days, and chronic is >90 days. Mechanical neck pain is defined as including WAD I/II, with or without headaches, and with or without radicular findings

Strong Evidence of Treatment Effect

| Mobilization and/or manipulation + exercise (1,2) | short-term and long- term | | Mechanical neck pain (MNP) sub-acute/chronic, with/without head- ache |
|---|------------------------------|--|---|
|---|------------------------------|--|---|

Treatment method Treatment Effect Duration Treatment Effects Population

Moderate Evidence of Treatment Effect (2)

| Treatment method | Treatment Effect Duration | Treatment Effects | Population |
|--|--|---|--|
| Exercise alone | Immediate or long-term | | Chronic MNP with or without headache |
| Medication: IV glucocorticoid | | ↓ pain ↓ sick leave | Acute WAD |
| Medication: epidural injections | | ↓ pain↑ function | Chronic Neck disorder with radiculopathy |
| Low level laser (830 or 904 nm) | Intermediate term | ↓ pain ↑ function | Acute, sub-acute and chronic MNP including degenerative changes |
| Electrotherapy- short course of low frequency pulsed electromagnetic field | Immediate effect of short duration only; less duration than 'short-term' | | Acute WAD I/II, acute or chronic MNP including degenerative changes |
| Intermittent traction | Short-term | ↓ pain | MNP with degenerative changes. Neck disorder with radicular findings (NDR) |
| Acupuncture | Immediate or short-term | ↓ pain | Chronic MNP and NDR |

Mobilization and Manipulation

What is mobilization?

Mobilization is a low velocity, small or large amplitude passive movement technique or neuromuscular technique which creates movement within a joint. This movement is performed within the patient's physiological range of cervical motion. The client is able to control this movement; he/she is able to actively prevent the physiotherapist from performing or continuing the movement (1).

What is manipulation?

Manipulation performed by qualified physiotherapists is a localized high velocity, low amplitude force directed at a joint segment (1). Manipulation has been shown to decrease muscular tone surrounding a joint (4); it is also thought to increase movement of a joint by affecting capsule stiffness, breaking adhesions, or freeing a fixated joint (fixated due to loose body, for example).

This technique is performed at end of range, and the client is not able to actively prevent the movement from occurring. Therefore, a series of safety tests are performed prior to considering performing the technique, informed consent is obtained prior to performing a manipulation, and a pre-manipulative hold is held at which time consent to proceed is obtained again. The client is informed that they may withdraw their consent at any time.

Which physiotherapists are qualified to perform spinal manipulation?

- 1. Physiotherapists who trained to perform spinal manipulation within the Canadian Orthopaedic Division of the Canadian Physiotherapy Association have the designation Dip.Manip and/or FCAMT.
- 2. Physiotherapists who have graduated with a Masters of Clinical Science in Manipulative Therapy from the University of Western Ontario.
- 3. Physiotherapists who have completed the full MDT program through the Robin McKenzie Institute

To earn their designations, these physiotherapists undergo rigorous, multi-level and multiple year educational programs, which includes didactic and practical learning, and written, oral and practical examinations.

What exercises work?

A systematic review of the literature was recently performed by the Cervical Overview Group. A paper has been published outlining the exercises that have been shown to be most effective for the treatment of mechanical neck disorders (3). These exercises are a combination of exercises for local cervical spine stabilizers and more global exercises. An example of an isolation and endurance exercise for the deep neck flexors is shown below.





Exercise Instructions; Place head in neutral position using a pillow. Place tongue on roof of mouth. Without contracting large muscles on side of neck, track eyes down to toes. When eyes cannot track any further down, have the patient nod the head a small amount—thereby activating the short flexors of the neck. Hold, relax, and repeat.

Why use some of these treatment methods if they have not been shown to have a strong treatment effect?

Treatment modalities that result in short-term effects do have their place in a physiotherapy treatment program, when used in conjunction with other techniques that have been shown to provide long-term effects. For example, with some clients a predisposing factor is present which does not allow them to participate in the exercise program which is required to help correct their problem. However, the exercise is essential to correction of the problem. At these times, modalities which provide short-term pain relief or which temporarily reduce muscle tone may enable the client to perform the required exercise, which will then allow the overall condition to improve, eliminating the need for the pain management treatment technique.

Treatment programs must be individualized to client needs, and may incorporate various treatment modalities in order to obtain the desired effects.

References

Gross AR, Hoving JL, Haines TA, Goldsmith CH, Kay T, Aker P, Bronfort G, Cervical overview group, The Cochrane Collaboration. *Manipulation and mobilization for mechanical neck disorders* (Review).

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Sterling M, Jull G, Wright A. Cervical Mobilisation: concurrent effects on pain, sympathetic nervous system activity, and motor activity. Manual Therapy 2001 6(2), p.72-81.

Clinic News



Manual Concepts Physiotherapy

Partners **Scott Whitmore** and **Francine Doré** would like to offer congratulations to registered massage therapist **Johanna Thackwray** and her husband Charley Parker on the birth of their first child.

A big welcome to **Jeanine Marsh RMT** who has joined the Manual Concepts team to help cover for **Johanna Thackwray** during her maternity leave..

Thank you physiotherapist **Scott Whitmore** for your hard work in organizing / hosting Lyn Watson's "The Shoulder Complex" course (Part 1 & 2) recently held at the Guelph Cutten Club.



Congratulations to physiotherapist **Teresa Fox** and husband Michael on the birth of their 2nd child. Teresa was also very busy this past year completing her **Level 4 Manual Therapy** training.

Congratulations to **Rachael Nywening** (formerly Everts) on her recent marriage to husband Mark.

Congratulations to physiotherapist **Cathy Whistle** who raised \$3,000 for the Sir. Isaac Brock school. The school will use this money in a program designed to help children with autism.

Congratulations to physiotherapist **Francine Doré** on completing her Clinical Skills Update Certification through the Robin McKenzie Institute.

Clinic Hours and Services



Manual Concepts Physiotherapy

Services

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

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
- Arthritis & degenerative conditions
- Postural dysfunctions

Hours:

Mon, Wed & Thur. 12:00pm – 8:00pm Tuesday & Friday 8:00am – 4:00pm

- Handicapped Access
- Ample Free Parking



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Services

Typical Conditions Treated

- Post MVA programs
- Intramuscular Stimulation (IMS)
- Work injury rehabilitation
- · Sports physiotherapy
- Fitness assessments & programs
- TMJ treatment programs
- BPPV treatment programs
- Acupuncture
- Massage Therapy
- Pedorthic services & Orthotics
- Manual Therapy

Hours:

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

- 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
- Osteopathic treatments
- Functional Abilities Evaluations
- Handicapped Access
- Ample Free Parking



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