FIT NEWS

Fall 1998

Hours of Operation - Monday through Friday 7:30am - 6:00pm, Saturday 9:00am- 3:00pm
Child Supervision available - (Please arrange a mutually convenient time in advance if child supervision is required)

Helping you get to know our Fitness Therapists a little better:

Physiotherapists:	Areas of Practice
Anne Dawson	❋ Musculo-skeletal Injuries, Chronic Pain Syndromes, TMJ and Neck Dysfunction, Acupuncture, Craniosacral Therapy, Pilates Rehabilitative Exercise
Marina Pianosi	❋ Craniosacral Therapy, Feldenkrais Method, Acupuncture, Pilates Rehabilitative Exercise
Gisele St. Hilaire	❋ Musculo-skeletal Injuries, Spinal Syndromes, Acupuncture, Craniosacral Therapy, Pilates Rehabilitative Exercise
Lesa Campbell	❋ TMJ and Neck Dysfunctions, Musculo-Skeletal Injuries, Stabilization Rehabilitative Exercise
Krista Schaan	❋ Musculo-skeletal Injuries, Sports Injuries, Foot Orthotics, Rehabilitation Exercise Therapy
Dona Watts-Hutchings	❋ Musculo-skeletal Injuries, Sports Injuries, Pilates Rehabilitative Exercise

Massage Therapists:

Robert Stegmaier	❋ Swedish Massage, Deep Connective Tissue Massage, Acupressure massage, Craniosacral Therapy

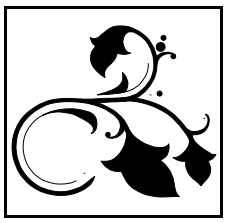
Physio Events

☞ Fitness Physiotherapy welcomes two new physiotherapists to our staff - Krista Schaan, PT and Dona Watts-Hutchings, PT. Krista and Dona joined the clinic during the summer.
☞ Our new Pilates Exercise and Reformer schedule will be effective September 7, 1998.
☞ TMJ Support Group - next meeting will be on Tuesday October 27th at 7:00pm. Our speaker, Anne Dawson, PT, will speak about the benefits of "Craniosacral Therapy" for the TMJ patient.
☞ Lost and Found: La Parka Outer Shell left at the clinic in May, please identify it if it's yours!

IN THIS ISSUE:

Fitness Physiotherapy Ltd.
Mission Statement
We are a team of licensed Physiotherapists utilizing the full spectrum of therapeutic knowledge
Our goal is to provide exemplary treatment as effectively and efficiently as possible.

WHICH PILLOW IS BEST?



Benign cervical pain syndromes affect up to 80% of us, sometime in our lifetime, according to epidemiological studies. The incidence of neck pain increases with age and is often accompanied by headaches and pain radiating into the arms. Is there an orthotic neck device that is useful for decreasing pain levels, improving sleeping patterns, and improving daily function?

Numerous neck devices are available and they have their uses in different circumstances. Soft collars will not limit conscious active neck movement. They have been shown to be beneficial if worn during sleep to limit unconscious neck movement. Pillows do not immobilize the neck, but may contribute to comfort. The roll type pillows are useful if they fit the sleeper's neck well and they tend to sleep in side lying positions. They will not be effective if the diameter of the roll is inadequate to simultaneously support both the head and the neck. When lying on your back the roll may promote cervical extension in some people, which is poorly tolerated by many individuals with neck pain and can contribute to snoring. The roll compresses or flattens during use and is difficult to maintain in position because of its cylindrical shape.

The water-based pillows have been shown to have highest satisfaction scores when compared with standard and roll-type pillows. The presumed positive effect of the water-based pillow is due to its ability to spontaneously conform to the position and shape of the head and neck. Because water is added, the pillow can be custom made to width. The polyester fibre fill part is compressed by the head and neck and it transfers the weight to a supporting non-compressible water filled pouch and maintains it during any changes in sleep positions. This pillow stays in place because of the weight of the water. This pillow should be used on a flat surface bed.

The standard polyester fibre pillow is the cheapest. Every type of pillow is marketed with lot of positive testimonials. Some pillow companies allow you to try them out and return them if they are not useful; so ask. In cases of injury or muscle strain your pillow needs may change so you can get comfortable neck support. It is best to avoid the use of more than one pillow unless directed by medical advice. More research is needed to evaluate the presumed benefits of pillows with regard to pain reduction and sleep parameters.

Ref: Lavin, Robert A. et al. Cervical Pain: A Comparison of Three Pillows. Arch Phys Med Rehabil Vol. 78, Feb. 1977

1998 EXERCISE CLASS TIMETABLE

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					PilatesIII Mat 9-10
					PilatesIIMat10-11
	Reformer 11 –12	Reformer 11 –12	Stailization11-12	PilatesI Mat11-12	PilatesI Mat11–12
	Pilates II Mat 12-	PilatesIII Mat12–1		Reformer 12 – 1	Reformer 12 –1
			Reformer 1 –2		Reformer 1 – 2
Reformer 2 –3					
Pilates II Mat 5 –6	Pilates I Mat 5 –6	Reformer 5 –6			
Reformer 6 – 7		Pilates I Mat 6 - 7			

*Note: Please see your Physiotherapist for further information or referral. All classes are taught by a licensed Physiotherapist. Fees are billable as Physiotherapy, after appropriate authorization. Classes can be combined with other treatments; please pre-register.

FIBROMYALGIA SYNDROME: AN OVERVIEW

Fibromyalgia syndrome (F.S.) is a chronic pain disorder of unknown cause, characterised by wide spread musculoskeletal aches, pains, stiffness, and general fatigue. Complaints of internal organ dysfunction such as irritable bowel or bladder can accompany the musculoskeletal symptoms. Frequently misdiagnosed, F.S. is often confused with other conditions such as myofascial pain syndrome, rheumatoid arthritis, chronic fatigue syndrome or hypothyroidism, any of which could also occur with Fibromyalgia.

Fibromyalgia syndrome is the third most commonly diagnosed rheumatic disorder after osteoarthritis and rheumatoid arthritis. Most patients endure many years of symptoms before presenting themselves for diagnosis, between the average age of 34-53 years. In 1990, the American College of Rheumatology concluded that F.S. could be diagnosed by a history of widespread pain occurring for longer than three months in combination with pain in 11 or more out of 18 specified tender points in muscular tissue on both sides of the body. The following problems are probably significant in causing fibromyalgia to occur:

1. **Deprivation of Restorative Sleep** – studies show that FS patients experience intrusion of deep and other sleep periods of slow delta-wave or stage IV NREM by rapid alpha-waves. This causes muscle fatigue and tenderness.

2. **Neurobiomechanical Abnormalities** – studies show that FS patients have decreased levels of tryptophan, an amino acid that is a precursor to serotonin. Serotonin is an important neurotransmitter for deep sleep, deactivating pain pathways and allowing muscles to work. Serotonin depletion causes symptoms of non-restorative sleep, musculoskeletal complaints, depression, and perceived pain. Medications such as tricyclic compounds otherwise called amitryptyline, or cyclobenzaprine etc. are helpful due to their action of blocking the re-uptake of serotonin at the level of the synaptic cleft where it is used by the nerves to transmit signals.
   Substance P is a neuropeptide involved in pain transmission in the central nervous system. High levels of Substance P are related to symptoms of sadness, inner tension, concentration difficulties, pain, memory disturbance and flared skin responses. It is speculated that endorphins (released in the body by exercise, medication, or acupuncture) inhibit or stop the release of substance P and therefore help to modulate these symptoms.

3. **Sympathetic Nervous System Involvement -** recent anatomical studies show sympathetic nerve connections to muscle exist, which might explain the FS symptoms of widespread muscle tension and tenderness when exacerbated by stress (i.e. trauma, lack of sleep, excessive or repetitive exercise). Gentle aerobic and rhythmical movement activities, meditation, and acupuncture are useful tools for calming the sympathetic nervous system.

4. **Local Tissue Factors** – studies have shown some local muscle tissue damage in FS patients, likely related to the lack of oxygen flow because of increased muscle tension. There is decreased strength capacity possibly because strong voluntary contractions have been inhibited by pain. There is often low levels of a growth hormone, somatomedin C present, 80% of which is secreted during stage IV NREM sleep. Reduced levels of this hormone may be linked to lack of proper muscle tissue repair, and excessive post-exertional muscle microtrauma in F.S. patients. Regular and gentle aerobic and rhythmical movement activities, and sleep restoring activities such as medications, meditation, acupuncture, etc. are useful tools for treating these tissue factors over the long term.

FIBROMYALGIA SYNDROME: AN OVERVIEW (Con't)

5. **Physical Trauma and Viral Onset** – Many F.S. patients can relate the onset of their illness to a physical trauma such as a severe muscle strain, a motor vehicle accident, a fall, or after a virus caused immunological dysregulation. Research has not documented to date any conclusive causal relationships.

6. **Psychological Factors** – This hypothesis centers on the psychological symptoms of anxiety and depression associated with F.S. However, it is often difficult to assess whether the depression existed before the onset of F.S. or is a result of chronic illness. Usually both the depression and F.S. are treated as two separate components so that both conditions improve. Treatment programs that include stress and chronic pain management and learning new coping strategies are associated with improved symptomology.

Appropriate treatment for fibromyalgia should address the multi-functional features and be individualized as necessary. Its goals should be ① break the pain cycle, ② restore sleep patterns, and ③ increase functional activity levels. Treatment should include education about fibromyalgia, life style changes, relaxation techniques, sleep management techniques, stress management, and good nutrition. Treatment should also promote participation in regular aerobic and gentle movement activities such as aquasize, walking, Pilates exercise, yoga, Tai Chi; other treatments such as acupuncture, gentle massage or medications may be helpful at times. Many medical professionals such as physicians, physiotherapists, occupational therapists, psychologists and dieticians are useful for helping to learn how to become self-sufficient in managing fibromyalgia.

Fibromyalgia syndrome is a multifactorial condition with unknown cause and no proven effective long-term management program. However, much progress has been made in research since diagnostic guidelines were established in 1990. To date, the two most important interventions for long term management of F.S. are patient education and physical exercise.

Recommended Reading:

"Fibromyalgia & Chronic Pain Syndrome, A Survival Manual", Devin Starlanyl, M.D., Mary Ellen Copeland, M.S., M.A. New Harbinger Publications, ISBN 1-57224-046-6

"Fibromyalgia", by Dr. C. Man, Winnipeg, MB – Henderson Books, ISBN 0-929130-09-X

Local Fibromyalgia Support Group:

"Fibromyalgia Support Group of Winnipeg, Ltd." Located at 825 Sherbrook Street, Winnipeg, MB Tel: 772-6979

- For more information, help with symptomology or to develop an appropriate exercise program please contact your physiotherapist.
- Ref: "Fibromyalgia Syndrome: An overview", Physical Therapy Vol 77 #1, January 1997