



PHYSIO FOCUS

PHYSIO FOCUS is a bi-monthly publication geared towards providing practical physiotherapy and health information.

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NOI Fitness Classes

Spring/Summer Class Schedule

Please sign up at front desk!

Pilates Mat

Mondays at 5:30 pm

A floor based exercise program that uses your own body or small props to build core strength and retrain proper muscle patterns while increasing your mind-body awareness.



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“Motivation will almost always beat mere talent”

Neck Pain: Manipulation, Mobilization, Exercise

Neck pain has been reported to have a life time prevalence of 66% in North America¹. As such, the options for conservative management and pain relief can take many forms. These interventions can range from physical modalities to manual therapy to exercise prescription.

Schroeder and colleagues (2013) conducted a systematic review of 7 research articles to determine the relative benefit of certain treatment options. The authors compared manipulative therapy and mobilization to standard therapeutic interventions. An important differentiation the authors aimed to highlight was the one between chiropractic manipulation (joint moving outside physiological range) and mobilization (movement of joints within normal physiological range).

“Their review found that manipulation or mobilization therapy has limited benefit when compared with physical therapy or exercise in both acute and chronic neck-pain patients”. More specifically they found;

1. No difference between chiropractic manipulation and exercise;
2. No functional improvements were found in the chiropractic manipulation group when compared to exercise prescription group in the long-term;
3. For chronic pain, the use of exercise and physiotherapy showed the highest level of benefit;
4. No differences between mobilization and manipulation for short term relief of neck pain.

The authors also discussed the growing trend of “multi-modal” treatment approaches that combine differing treating providers and hoped the above results would guide treatment decisions.

When selecting the most evidence-based treatment options for an individual suffering from neck pain, it is important to weigh the risk-benefit ratio of each technique. These results support previous evidence in the research that the most cited and supported intervention for chronic and acute neck pain, with the lowest negative side effects, is exercise prescription.

Exercise of the Month: Shoulder Proprioception!



Proprioception is a term that refers to your body's ability to “*accurately appreciate where your joint is in space*”. When one is experiencing shoulder pain of any origin, that pain will negatively impact your body's proprioceptive capacity. As such, a comprehensive rehabilitation program must contain proprioception retraining exercises to assist in present recovery and also prevent chronicity.

The scapular exercise above involves applying a gentle pressure into the ball while tracing small circles and eventually the alphabet. Ask one of our NOI practitioners today for a personalized demonstration!

Hand Arthritis and Physiotherapy

Hand osteoarthritis (OA) is a common chronic condition involving one or more joints of the thumb and fingers which has an estimated prevalence rate from 13% to 26%, with greater percentages affecting women². Hand OA is associated with pain, reduced grip strength, loss of range of motion (ROM), and joint stiffness, leading to impaired hand function and difficulty with daily activities.

Ye and colleagues (2011) conducted a Medline search and reviewed ten research studies that met their inclusion criteria (PEDRO >6). The authors looked at numerous non-surgical treatment options for clients suffering from radiograph supported OA. Their search also only included quasi- and non-quasi randomized control trials.

The authors' results lead to the highest quality interventions found to improve pain, ROM, strength, and function which included (not in order):

1. Low Level Laser Therapy and heat application
2. Physiotherapy exercises
3. Night splints
4. Acupuncture
5. Massage and manual therapy

Each of the above interventions was found to contribute to the overall healing process in various ways. Laser therapy appeared to regulate chondrocytic proliferation and stimulate collagen synthesis and it is thought to have analgesic effects as well as bio-modulatory effects of microcirculation.

A comprehensive program must incorporate the above based interventions but should be determined on an individual basis as the clinical presentation of hand OA is unique for each person. A qualified physiotherapist is able to determine which modalities of treatment are most suitable and therefore effective for each client's specific needs. These needs will be determined by an accurate clinical assessment that is correlated to the radiological findings on an x-ray.

Health Corner

Goal of Corrective Exercise in Rehabilitative Process

With corrective exercise, the goal is to get off the corrective exercises. Plain and simple.

With that said, if your form is poor while performing exercises, there is no permanent way to get off of it. There is no corrective exercise for poor form. If you're practicing an exercise with less than optimal form, it necessitates corrective exercise. In essence, you create your own dependency on that fix.

When your form takes a detour for the better, it's really interesting to see how proper execution of corrective exercises de-necessitates those corrective exercises because it's corrective in and of itself. If you're practicing proper form and if you're hitting all those movement landmarks you need to hit to get better, it's really amazing to see how much that actually feeds into good-functioning and good-feeling body. It's a beautiful thing.

When someone requires physical rehabilitation, it's indicated that one or more systems in the body wasn't resilient to a stressor of some kind. The stressor could be an injury or disease. It could be too much exercise or wrong kind of exercise, or, right kind of exercise executed poorly. Either way, the body was unable to fend off the stressor, or, it was able to fend it off but at a very high cost which wasn't sustainable long-term.

Part of becoming more resilient to the stressors of life involves physical training and optimal lifestyle management. Intelligent and appropriate stressors that are catabolic in nature (i.e. physical activity) are very effective for (re)building resilient body when paired with intelligent lifestyle choices that are anabolic (rest and recuperation).

Here at the clinic, one of the questions we continuously seek a better answer to is: how can we help you to move often and move well.