



PHYSIO FOCUS

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

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NOI Fitness Classes

Fall Class Schedule

Please sign up at front desk!

Pilates Mat

Mondays at 5:30pm

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.

Essentrics

Mondays at 6:35pm

A full body workout that will rapidly change the shape of your body through a dynamic combination of stretching and strengthening.



“To keep the body in good health is a duty... otherwise we shall not be able to keep our mind strong and clear.”- Buddha

Treatment of Muscle Tears in Sport

The breadth of research and opinions on the proper conservative management of muscle tears has progressed significantly, mirroring technological advancements. However, there has been no unified criteria to establish which therapeutic interventions should be used and when. The aim of Fernandez-Jaen et al (2016) was to issue a consensus-based guide for muscle tears based on current biological and physiological knowledge.

Prior to examining the author's recommendations, it is important to define the key phases of muscle repair:

1. Inflammatory Phase: duration 1-2 days
2. Vascularization Phase: until day 14 after injury onset
3. Proliferation/Cell Stimulating Phase: day 14-28 after injury onset
4. Remodeling Phase: day 28 to 3-6 months after injury onset

The authors, following this agreed upon phase structure, met and each member of the panel received a questionnaire regarding the treatments recommended during each phase of healing. They defined “unanimity” as 100% agreement between all panel members, whereas “strongly recommend” was defined as 75-99% agreement.

Their results provide an evidence-based framework for managing muscle tears from onset of injury to later stages of healing. This clinical guide is outlined below:

1. Therapeutic Indications in the Inflammatory Phase (0-2days)

- a. unanimity- ice, elevation, sport rest, analgesia, no immobilization
- b. strongly recommend- compression, no NSAIDS, mobilize, no WB

2. Therapeutic Indications in the Vascularization Phase (day 2-14)

- a. unanimity- muscle contractions, pain-free stretching, isometrics, modalities (ultrasound, IFC), manual therapy
- b. strongly recommend- echography, vascular physiotherapy

3. Therapeutic Indications in the Proliferation Phase (day 14-28)

- a. unanimity- stretching, increase muscle demand, basic sport specific movements, strengthening, gradual increase of sport specific technique, manual therapy, proprioceptive training
- b. strongly recommend- antithrombotic therapies (modalities), echography

4. Therapeutic Indications in the Remodeling Phase (day 28+)

- a. unanimity- advanced strength and stability exercises, return to sport if pain-free simulations

Exercise of the Month: Scapular Stabilization



Scapular stability training is an essential component of any rehabilitation program involving the upper extremity. Stability can be defined as “control in the presence of change”. Practically this means how well we can coordinate movements in our shoulder to produce the most efficient and effective movement patterns.

Utilizing unstable surfaces and equipment are essential in providing the “change” component. In the above exercise, the fitter device allows multiple muscles to be activated, recruited, and coordinated while maintaining the desired position of the joint. These muscle contractions are also aided by a heightened neurological awareness in the position. Ask your NOI team today how to incorporate this great exercise!

Essentrics as a Valuable Fitness Option!

Essentrics is more than your typical fitness program. Essentrics is truly a health-promoting program. Essentrics’ mission is to create a workout that will help people move freely and live actively without pain. Each workout engages all 650 muscles in order to create a balanced body. This means that the strength of your muscles does not restrict your movement, and your flexibility is enhanced by your strength. It is a dynamic workout designed to pull the joints apart by elongating the muscles and challenging them in a lengthened position (think straight arms and long spine). It is a completely original technique that draws on the flowing movements of tai chi, which is aimed to improve balance and overall well-being. It also incorporates the strengthening theories behind ballet, which create long, lean flexible muscles. In addition, it includes the restorative principles of physiotherapy, which create a pain-free body.

Essentrics is currently taught all over the world to men and women of all ages and levels of fitness. This may sound too good to be true, but people well into their 80s can safely do the program, and The Montreal Canadiens hockey team practice the technique twice a week as part of their training. So whether you are an avid cyclist, you are returning from injury or you have not exercised for some time, this workout is for you. Essentrics benefits can also be seen when used as a compliment to any other form of movement-whether that be training for a specific sport or as part of a rehabilitation program.

Most importantly, an Essentrics class is fun! Essentrics is practiced to music and it feels good while doing it. No movement is ever held, which means it helps improve circulation aiding in its healing properties. Essentrics uses continuous circular type movements in order to rebalance the body. There is a natural emphasis to work through the muscle chains, as you are only as strong as your weakest muscle!

If you’re still not convinced, check out this video:

(<https://www.youtube.com/watch?v=jIOZW-IoZ9o>) or better yet come try a class Mondays at 635pm!

Health Corner

JE Model of Tissue Recovery Infographic!

Below is a visual representation developed by NOI to show the varying factors that influence tissue healing following an injury. The three main systems (active, passive, neural) all impact physical recovery in their unique way. These systems interact and their relative contributions to the experience of pain varies depending on the nature and type of injury.

