

Sport Injuries of the Lower Extremity

At advantage physiotherapy we are committed to providing treatment based on the highest quality of research that is available. This newsletter is a compilation of the latest research available on the treatment and prevention of sports injuries of the lower extremity.



Lower Limb injuries can be prevented in adolescent athletes

Exercises to prevent lower limb injuries in youth sports: cluster randomized controlled trial (Olsen et al. BMJ. 2005 Feb 26)

Methods: Cluster randomized controlled trial with clubs as a unit of randomization, 1837 players in total, intervention group underwent a structured warm-up program to improve running, cutting, and landing technique as well as neuromuscular control, balance and strength.

Conclusion: A structured program of warm-up exercises can prevent knee and ankle injuries in young individuals playing sports. Preventive training should therefore be introduced as an integral part of youth sports programs.

Effectiveness of a home-based balance-training program in reducing sports-related injuries among healthy adolescents: a cluster randomized controlled trial. (Emery et al. CMAJ. 2005 Mar 15; 72(6):749-54)

Methods: Cluster randomized controlled trial (n= 127), intervention group participated in a daily 6-week and then a weekly 6-month home-based balance-training program using a wobble board, control group only underwent testing.

Conclusion: Balance training using a wobble board is effective in improving static and dynamic balance and reducing sports-related injuries among healthy adolescents.

At Advantage Physiotherapy we are proud that we book assessments for one hour and treatments for thirty minutes for more one on one time with the physiotherapist. Our treatment is goal oriented and patient centered.

Help for Chronic Ankle Sprains

The effect of a proprioceptive balance board training program for the prevention of ankle sprains: a prospective controlled trial (Am J Sports Med. 2004 Sep; 32)

Methods: Prospective controlled study (n= 1127, volleyball players), intervention teams followed a prescribed balance board training program; control teams followed their normal training routine.

Conclusion: Use of proprioceptive balance board program is effective for prevention of ankle sprain recurrences.



Help for Chronic Ankle Sprains (continued)

Comparison of three preventive methods in order to reduce the incidence of ankle inversion sprains among female volleyball players (Br J Sports Med. 2004; 38:182-185)

Methods: Randomized controlled trial (n=52, people who had suffered ankle sprains the year before), players were randomly assigned to carry out a technical training program, a proprioception program, or to use an orthosis.

Conclusion: The three preventive strategies were all effective in preventing further ankle sprains. Technical training was slightly more effective than the other two methods. Orthosis was not effective in athletes who had suffered ankle sprains more than three times during their careers. Under those circumstances, technical training and proprioceptive training were equally

Eccentric Exercise Important in the Treatment of Achilles Teninopathy

Clinical improvements after 6 weeks of eccentric exercise in patients with mid- portion Achilles tendonopathy—a randomized trial with 1-year follow- up. (Scand J Med Sci Sports. 2004 Oct; 14(5))

Methods: Prospective randomized clinical trial (n=44), patients were randomized to one three treatment groups for twelve weeks: eccentric exercises, a night splint or a combination of both treatments

Conclusions: We conclude that eccentric exercises seem to reduce pain and improve function in patients with Achilles tendonopathy. At six weeks, the eccentric group reported a significant pain reduction which lasted for one year. More patient's in the eccentric exercise group than in the splint group returned to sport after twelve weeks.

Eccentric overload training for patients with chronic Achilles tendon pain—a randomized controlled study with reliability testing of the evaluation methods (Scand J Med Sci Sports. 2001 Aug; 11(4))

Methods: Randomized controlled trial (n=44), experiment group underwent a twelve week treatment protocol for patient's with chronic Achilles tendonitis (greater than three months)

Conclusions: There was on overall better result for the experiment group with significant improvements in plantar flexion, and reduction in pain on palpation, number of patient's having pain during walking, having periods when asymptomatic and having swollen Achilles tendon. The controls did not show such changes. Furthermore, at the one- year follow- up there were significantly more patient's in the experiment group, compared with the control group, that were satisfied with their present physical activity level, considered themselves fully recovered, and had no pain during or after physical activity.