

## Knee Treatment Studies

At Advantage Physiotherapy we are committed to providing treatment based on the highest quality of research that is available. The October newsletter is a compilation of the latest research available on the treatment of the knee.



### Multi-Modal treatment for Patello-femoral Pain Syndrome and Anterior Knee Pain

**Physical therapy for Patello-femoral pain: a randomized double- blinded, placebo- controlled trial (Crossley, K. et al, 2002, Am J Sports Med)**

Study: Multi- Center, randomized, double- blinded, placebo-controlled trial (n=71).

Methods: Treatment group had six sessions (once per week) of quadriceps muscle retraining, Patello-femoral joint mobilization, patellar taping and home exercises. Control group had placebo treatments

Conclusion: A six- treatment, six week physical therapy regime is efficacious for alleviation of patello femoral pain

### Physiotherapy for anterior knee pain: a randomized controlled trial (Clark, D. I. et al, 2000, Am Rheum Dis)

Study: An observer blind, prospective, factorial design randomized controlled trail (n=81).

Methods: Four treatment groups 1) exercise, taping, and education; 2) exercise and education; 3) taping and education; and 4) education alone

Conclusion: The proprioceptive muscle stretching and strengthening aspects of physiotherapy have a beneficial effect at three months sufficient to permit discharge from physiotherapy. These benefits are maintained at one year

### Manual Therapy and Osteoarthritis of the Knee

#### Effectiveness of manual physical therapy and exercise in Osteoarthritis of the knee: A randomized control trial (Deyle, D.G. et al, 2000 Annals of Internal Medicine)

Study: Randomized controlled clinical trail (n=83)

Methods: The intervention group received manual therapy to the knee as well as to the lumbar spine, hip, and ankle as required and performed a standardized knee exercise program in the clinic and at home. The control group had placebo ultrasound. Both groups were seen in the clinic twice a week for four weeks

Conclusion: A combination of Manual physical therapy and supervised exercise yields functional benefits for patients with OA of the knee and may delay or prevent the need for surgical intervention

**ART is an adjunctive treatment for conditions such as carpal tunnel syndrome, elbow and shoulder tendonitis and spinal pain and dysfunction.**



## There are a Wealth of Studies on Exercise and Knee Osteoarthritis

I, Valerie Brouwers, did a literature review of randomized control trials and knee OA. I collected nine articles that stated that exercise is helpful in treating knee OA and only one that stated that it was not helpful (this last study was using an unsupervised home exercise program). I would like to highlight two of the articles -

### **Home based exercise programme for knee pain and knee osteoarthritis: randomized control trial (Thomas, K.S. 2002. BMJ)**

Study: Pragmatic, factorial randomized controlled trial of two years duration (n=800)

Methods: Participants were randomized to four groups to receive exercise therapy, monthly telephone contact, exercise therapy plus telephone contact or no intervention (exercise program lasted two years and required participation daily for up to thirty minutes and was a variety of ROM, stretching and strengthening)

Conclusion: A simple home based exercise program can significantly reduce knee pain

### **The efficacy of home based progressive strength training in older adult with knee osteoarthritis: a randomized controlled trial (Baker, KR, 2001, J Rheumatol)**

Study: Randomized control trial (n=38)

Methods: Participants were randomized to a four month home based progressive strength training group or a nutritional education program

Conclusion: High Intensity, home based strength training can produce substantial improvements in strength, pain, physical function and quality of life in patients with knee OA

**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.**