



Physical Therapy Associates of Schenectady, P.C.

Evidence for Physical Therapy

Rehabilitation of ACL Injuries Submitted by Dr. Daniel Phelan

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The role of physical therapy and rehabilitation is crucial to getting athletes back to performing at their pre-injury level of participation following an injury of the anterior cruciate ligament. There have been many changes to the way that ACL-injured athletes are treated over the last 25 years.


Prior to undergoing surgery, the goals of therapy are to decrease pain and swelling and restore full motion to the knee. Patients who undergo ACL reconstruction on an inflamed, stiff or swollen knee have a much higher risk of developing arthrofibrosis (a condition where scar tissue forms in the knee which leads to

stiffness) than those who delay surgery to allow the joint to calm down.

Following surgery, I typically get patients into therapy within 2-3 days to allow them to start working on range of motion. In the 1980's patients were casted in slight flexion for several weeks following ACL surgery. Donald Shelbourne, an orthopedic surgeon in Indianapolis, noticed that his patients who were non-compliant, took their braces off early and walked before they were supposed to, actually did better than the patients who listened to him. Based on his observations we now allow patients to put full weight on their legs right after

surgery. I try to get patients to get their knees moving as soon as we can after surgery. Casts are a thing of the past. Even with this accelerated rehabilitation and advances in surgical techniques, recovery from ACL surgery takes up to 6 months.

Dr Daniel Phelan is a board certified Orthopedic Surgeon. His areas of interest include sports medicine and surgery of the knee and shoulder. Other areas of expertise include trauma surgery and knee and shoulder replacement. Dr. Phelan sees patients for Capital Region Orthopedics at their Albany and Latham offices.



Treatment of Cervical Radiculopathy

by Kevin McLaughlin MS,PT

Cervical radiculopathy is a common diagnosis seen in most outpatient physical therapy clinics. Two recent studies looked at outcomes when comparing types of treatments. One study compared manual physical therapy to therapeutic exercises to a combination of the two.

Greater reduction of symptoms were seen in the patients that re-

ceived manual physical therapy combined with exercise versus either intervention alone.

Another frequent modality used to treat cervical radiculopathy is cervical traction. Young et al looked at the effects of manual therapy and exercise with and without cervical traction added. Findings indicate no significant differences in outcome

measures at 2 and 4 weeks between the groups. The researchers concluded that the addition of mechanical cervical yields no significant additional benefit to pain, function, or disability in patients with cervical radiculopathy.. This study did have some limitations that need to be addressed in future studies.

Ragonese, John. A RCT Comparing Manual Physical Therapy to Therapeutic Exercises to a Combination of Therapies for the Treatment of Cervical Radiculopathy *Orthopedic Practice* Vol.21, No.3 2009

Young, Ian A. et al. Manual Therapy, Exercise, and Traction for Patients with Cervical Radiculopathy: A RCT *Physical Therapy* July 2009

High Intensity Exercise After Surgery

by Dennis Judd PT, Cert. MDT

Targeted high intensity exercises performed by compliant patients improved the outcomes of back surgery.

Following back surgery, patients often wonder how active they should be and seek the advise of their physician or physical therapist. A recently published Cochran Review provides some evidence to support use of high intensity exercises shortly after surgery.

The review looked pain and functional

outcomes with follow up completed at 3 and 6 months following surgery.

The studies supported the use of high intensity rehabilitation exercises, started 4 to 6 weeks after surgery, especially when functional status is measured. Home based or supervised exercise were equal when compli-

ance was equal between the groups.

Good outcomes were achieved sooner and more frequently than when low intensity exercises were performed. No evidence indicates that exercises resulted in increased re-operation rates.

Ostgelo, Raymond, et al. Rehabilitation After Lumbar Disc Surgery: An Updated Cochran Review *Spine* August 1: 34(17)

Best Management for Heel Pain

by Kevin McLaughlin MS,PT

“There is insufficient evidence to establish the optimal physical therapy management strategies for patients with heel pain and little evidence of long term effects,” states the authors of a recent study.

Sixty patients with primary complaints of plantar heel pain were assigned into

one of two groups. One group received manual physical therapy and exercise (METX), while the other group received electro physical agents and exercise (EPAX). The patients completed several self report questionnaires to establish baselines and outcomes were measured at 4 week and 6

month follow-ups.

At both 4 weeks and 6 months the METX group showed greater improvements compared the EPAX group.

Cleland, JA et al. Manual Physical Therapy and Exercise Versus Electro physical Agents in the Management of Plantar Heel Pain *JOSPT* August 2009

Manual physical therapy and exercise showed better outcomes versus modalities and exercise in the treatment of plantar heel pain.

Improved Health in the Workplace

by Dennis Judd PT, Cert. MDT

Exercise has been shown to improve individuals health in many ways. In this study it was also shown to improve the economic health of the workplace.

Morgens Pedersen and others demonstrated that participation in either a general physical exercise program or a

resistance training program results in better health as well as improved physical capacity. In addition, workers had fewer complaints of musculoskeletal pain and demonstrated improved endurance.

By including employers in the movement toward improved exercise compliance perhaps

we will have greater success in addressing this public health issue.

Pedersen MT, et al, The Effect of Worksite Physical Activity Intervention on Physical Capacity, Health, and Productivity: A 1 Year Randomized Controlled Trial *Journal of Occupational and Environmental Medicine* 51(7) July 2009

Monitored exercise at the workplace reduced musculoskeletal pain complaints.



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