**ACL Reconstruction Post‐Operative Rehabilitation Protocol**

The following is a generalized outline for rehabilitation following ACL reconstruction. The protocol may be modified if additional procedures, such as meniscal repair or micro fracture, were performed.

**Phase I: 0-2 weeks**

**Goals**

 Protect graft and graft fixation

 Control inflammation and swelling

 Early range of motion (ROM) with emphasis on full extension and flexion

 Restore normal gait on level surfaces

**Pain control**

* Regular oral pain killers
* Use ice packs (bag of frozen peas on a tea towel) for 15minutes 4x a day

**Weightbearing status**

 Weightbearing as tolerated with crutches for 2 weeks

**Range of movement Exercises**

 Passive extension – sit in a chair and place your heel on the edge of a stool or chair; relax thigh

muscles and let the knee sag under it's own weight until maximum extension is achieved.

 Heel props – place rolled up towel under the heel and allow leg to relax

 Prone hangs – lie face down on a table/bed with the legs hanging off the edge of the table; allow

the legs to sag into full extension.

 Flexion – limit to 90

 Passive flexion – sit on chair/edge of bed and let knee bend under gravity; may use the other leg

to support and control flexion

 Wall slides – Lie on your back with the involved foot on the wall and allow the foot to slide down

the wall by bending the knee; use other leg to apply pressure downward.

 Heel slides – Use your good leg to pull the involved heel toward the buttocks, flexing the knee.

Hold for 5 seconds; straighten the leg by sliding the heel downward and hold for 5 seconds.

 Quadriceps sets in full extension

 Straight leg raises in brace locked in extension

 Hamstring sets

**Phase II: 2 – 6 Weeks**

**Goals**

 Restore normal gait with stair climbing

 Maintain full extension, progress toward full flexion range of motion

 Protect graft and graft fixation

 Increase hip, quadriceps, hamstring and calf strength

 Increase proprioception

**Weight bearing status**

 Full weight bearing - wean off crutches

**Exercises**

 Continue as above, maintaining full extension and progressing to 125

 Stationary bicycling, stairmaster: slow, progressing to low resistance

 Hamstring curls

 Hip abduction, adduction, extension

 At 4‐ 6 weeks, ¼ partial squats, use table for support

**Phase III: 6 – 12 Weeks**

**Goals**

 Full active range of motion

 Increase strength

**Exercises**

 Stationary bicycling, stairmaster, elliptical: increases resistance

 Treadmill walking

 Swimming - front crawl kick only

 Balance and proprioceptive training

**Phase IV: Months 3 – 6**

**Goals**

 Improve strength, endurance and proprioception

 Begin agility training

**Exercises**

 May start jogging program, forward/straight running only

 Continue and progress strengthening

 Progress to running program at 5 months

 Begin agility training at 5 months

o Side steps

o Crossovers

o Figure 8 running

o Shuttle running

o One leg and two leg jumping

o Cutting

o Acceleration/deceleration/sprints

o Agility ladder drills

 Initiate sport‐specific drills as appropriate

**Phase V: 6 months post‐op**

**Goals**

 Maintain strength, endurance and proprioception

 Safe return to sport

**Exercises**

 Gradual return to sports participation

 Maintenance program for strength, endurance

**Return to sports criteria**

 Full range of motion

 No swelling

 Good stability on ligament testing

 Full strength compared to other leg

 Completed sport‐specific functional progression

 Running and jumping without pain or limp