

ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

REHABILITATION PROGRAM

DAY 1 - 14

AIMS:

- 1.reduce post-operative pain, control effusion and minimise effects of surgery on soft tissue.
- 2.restore normal gait.

GOALS:

- 1.reduce joint effusion
- 2.prevent infection / facilitate wound healing
- 3.re-establish muscle activation
- 4.restore full extension
- 5.manage donor site morbidity

TREATMENT STRATEGIES:

- 1.partial weight-bearing to full weight bearing as tolerated
 - 2.use of ICE, co-contractions and external pressure support to control pain swelling
 - 3.static quads, co-contraction (progressing into weight-bearing positions)
- NB - quadriceps exercises are to be closed kinetic chain
4. active range of motion aiming for full extension by two weeks post-surgery.
 - 5.prevent secondary patello-femoral joint problems (patellar mobilisation, myofascial releases ITB etc)
 - 6.retrain full extension at heel strike
 - 7.gentle hamstring stretches

2-6 WEEKS

AIM:

Restore normal function

GOALS:

- 1.full unrestricted ROM
- 2.reduce persistent effusion
- 3.early proprioceptive retraining
- 4.develop muscle control and endurance

TREATMENT STRATEGIES:

- 1.2-3 weeks - improve muscular control by progressing co-contractions
eg; two leg quarter squats, step ups and lunges
- 2.introduce stationary bike, stepper and leg presses as tolerated (do not start these activities until any persistent effusion settles)
- 3.Swimming once wound has healed
- 4.3-4 weeks - initially hamstring strengthening is achieved via co-contraction (closed kinetic chain).It is important to concentrate on hamstring stretches and increase resistance gradually to prevent recurrent injury.
- 4-6 weeks - open kinetic chain hamstring strengthening may begin but care must be taken to avoid strain injury as it impedes progress. Low resistance, high repetition weights to increase muscle endurance.
- 5.assessment and monitoring of gluteal control and length of hamstrings.
ITB, gastrocs and soleus, etc will prevent secondary deficits from developing

6-12 WEEKS

AIM:

Improve proprioception

GOALS:

- 1.improve endurance of leg musculature
- 2.increase total leg strength

TREATMENT STRATEGIES:

- 1.progress general strength work
- 2.hopping and jumping introduced into proprioceptive retraining (focus on good landing technique)
- 3.agility work (shuffle runs, ball skills, sideways running, skipping ropes etc)
- 4.pool work may commence with flippers
- 5.sports specific activity (sport dependent)

12 WEEKS - 6 MONTHS

AIM:

Prepare to return to sport.

GOALS:

- 1.introduce more sport specific activities
- 2.develop patina confidence
- 3.introduce agility and reaction time into proprioception work

TREATMENT STRATEGIES:

- 1.progress general strength work
- 2.hopping and jumping introduced into proprioceptive retraining (focus on good landing technique)
- 3.agility work (shuffle runs, ball skills, sideways running, skipping ropes etc)
- 4.pool work may commence with flippers
- 5.sports specific activity (sport dependent)

5-6 MONTHS

GOALS:

Return to sport safely

TREATMENT STRATEGIES:

- 1.open kinetic quadriceps exercises can be done safely
- 2.introduce polymetrics and sport specific drills
- 3.return to training and participating in skill exercises
- 4.improve power and endurance
- 5.advice re: modification for gradual return to sport