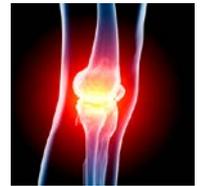


REHABILITATION AFTER ANTERIOR CRUCIATE LIGAMENT (ACL) SURGERY



Rehabilitation following ACL reconstruction is milestone based and varies from patient to patient. One stage should be completed before moving on to the next. Timescales have been entered as a guide:

RECOVERY PHASE (WEEKS 0-2)

THEME: REST, PAIN CONTROL & BRUISING REDUCTION

An ACL reconstruction effectively causes a new major injury to the knee. It is very important not to “overdo things” initially and allow the injury to settle.

Spend the majority of time at home with the knee elevated to the level of your chest

Tubigrip support dressings will produce gentle compression

Regular icing of the knee – 20 minutes, 5-6 times a day

Regular pain killers (Paracetamol & ibuprofen if tolerated)

Range of movement exercises concentrating on locking the knee out straight and gently flexing

Regular foot and ankle exercises to help circulate venous blood

Weight bear as tolerated with the help of crutches

Goals: Pain control, wound healing

REHABILITATION PHASE 1 (APPROX. WEEKS 2-8)

THEME: RANGE OF MOVEMENT AND SWELLING REDUCTION

During this period the knee becomes less painful – allowing increased activity and mobility. The aim is to regain a full range of movement and reduce swelling.

Discard crutches as comfort and stability allows and regain a normal walking pattern

Continue to ice the knee after exercise and take Paracetamol or ibuprofen as needed

Concentrate on regaining full knee extension. Knee flexion tends to improve as the swelling reduces

Commence stationary cycling – initially on low resistance – as comfort allows.

Resume normal daily activities.

Goals: Full range of movement & minimal swelling

REHABILITATION PHASE 2 (APPROX. 6-14 WEEKS)

THEME: REGAIN STRENGTH & BALANCE

During this period the objective is to restore power and strength to the knee. Following the “trauma” of an ACL injury and reconstruction surgery it is inevitable that the muscles around the knee (especially the quadriceps) waste away. Strength needs to be restored to allow further activities.

You should now be walking normally and performing “normal” activities of daily living

Commence a gym based exercise programme emphasising strengthening of all muscle groups including quadriceps, hamstrings, calf, gluteals & core strength. Closed chain exercises (foot fixed or on something) are preferential during this period

Activities include walking, cycling, swimming (not breaststroke kicks), rowing, cross-trainer

Wobble board & balance activities

Don't overdo it! – the new graft is at its weakest during this time.

Icing is still recommended after exercise

Goals: Single leg squats to 90degrees, normal walking, minimal swelling, cycling.

REHABILITATION PHASE 3 (APPROX. 12-24 WEEKS)

THEME: LIGHT AGILITIES & FOOTWORK

During this period of rehabilitation power, reflexes and balance return to the knee – permitting increasingly strenuous activity and the start of more “dangerous” side-stepping or “cutting” manoeuvres.

You may now commence jogging – avoid uneven ground and icy or slippery conditions

Begin plyometric exercises – jumping, hopping, short straight line sprints

Zig zag running & side to side hops

Gently build up activity as power and confidence returns

Ice after activities

Goals: Power, balance & proprioception restoration in preparation for sports specific training

REHABILITATION PHASE 4 (APPROX. WEEK 24+)

THEME: ENDURANCE TRAINING, INJURY PREVENTION EXERCISES & “SPORTS SPECIFIC” TRAINING

Fitness & aerobic endurance training

General Strengthening work

Sports specific training and exercises as directed by team or sports physiotherapist

Goals: Develop Match Fitness, regain sports specific skills and prevent further injury

RECOMMENDED ACL INJURY PREVENTION PROGRAMMES:

FIFA 11 PROGRAMME

The prevention programme "The 11" was developed by FIFA's medical research centre (F-MARC) in cooperation with a group of international experts. "The 11" is a simple, catchy and time-efficient preventive programme that comprises ten evidence-based or best-practice exercises and the promotion of Fair Play.

FIFA 11 PDF link:

http://www.f-marc.com/downloads/workbook/11plus_workbook_e.pdf

THE PEP PROGRAMME

The Santa Monica Sports Medicine Research Foundation – The PEP Program:
Prevent injury and Enhance Performance

“PEP programme” link:

<http://smsmf.org/pep-program>