

# Patient Information Sheet

## ACLR REHABILITATION PROGRAM

### Rehabilitation Program –

#### Stage One - Days 1 – 14 - *Immediately Post-operative*

Increase range of motion, decrease pain and decrease swelling.

#### Stage Two - 2 – 6 Weeks - *Hamstring and Quadriceps Control*

Increase range of motion, weight bearing and hamstring / quadriceps control.

#### Stage Three - 6 – 12 Weeks – *Proprioception Retraining*

Improve neuromuscular control and proprioception, strengthen the hamstrings, protect the graft and improve confidence.

#### Stage Four - 12 Weeks to 5 Months - *Sports Specific Training*

Incorporate sports specific exercises, incorporate agility and reaction time into proprioceptive work, increase total leg strength and develop confidence.

#### Stage Five - 5 – 6 months - *Return to Training and Competition*

Return to sport.

### Principles (for those who want more information)

1. Kinematics - Maximum ACL graft strain is produced by quadriceps contraction between 10 - 45° knee flexion **so be aware when exercising in this range.**
2. Connective Tissue Healing – There is a need to balance growth stimulus with overloading. Don't train too much or too little. **Let pain be your guide.**
3. Graft Protection – The graft is weakest between 6 – 12 weeks post-operative and **extreme care needs to be taken during this period.**
4. Mobilisation – Connective tissue healing is maximised by early mobilisation. Generally, more movement is better but again **let pain be your guide.**
5. Closed Chain Exercises – *Closed chain* exercises are done with the foot placed on a surface with the whole limb bearing load (a squat). *They compress and stabilise the joint.*

*Open chain* exercises are done with the foot free in space (a leg extension). *They stress and destabilise the joint.*

**Only closed chain exercises should be performed.**

6. Proprioception – The native ACL proprioceptors have been removed and joint position sense needs to be retrained.

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