ACL and PLC Reconstruction Protocol

Post-operative

- Cricket pad splint applied in theatre at approx. 30^o.
- Cricket pad splint to be exchanged for long lever hinged knee brace on 1st post-operative day with de-bulking of dressings. Brace set at 10^o -90^o for 6 weeks; to be worn at all times.
- Swelling management (Elevation).
- Gentle passive/active-assisted knee flexion and extension.
- TAQ's, SLR in brace. Provide Home exercise programme.
- NWB for 6 weeks.
- Avoid tibial external rotation postures and OKC hamstrings for 4 months.
- Discharge home on 1st post-operative day if there are no signs of distal neuro-vascular deficit and pain, wound and mobility allow a safe discharge. Patient should not be discharged with cricket pad splint.
- Make Ward referral to OP physio.

1-6 weeks

- Remove brace for washing/dressing and for supervised exercises if required. Or open brace to allow the exercises described below.
- Continue with brace 10°-90° at other times.
- Continue with patellar and tibiofemoral mobility ex's (avoid hyperextension).
- Continue with SQ's and SLR in brace.
- NWB hip/lumbo-pelvic muscle maintenance exercises.
- OKC knee extension between 90-40^o with no weight (set brace to these angles).
- Increase OKC extension by 10^o each week from week 5 (i.e. 90-0^o by week 8).
- Goals: ROM 0-90^o by 2/52 post-op, full extension 120^o by 6/52.

7-12 weeks

- **Start PWB** and **open brace to allow FROM**.
- Static bike without resistance.
- Continue with ROM and strength exercises.

12-16 weeks

- **WBAT from week 12** if no limp and able to SLR without lag.
- Wean off brace.
- Brisk walking program (20-30 mins daily).
- CKC ex's:
 - Double progressing to single leg squats (<70^o flexion).
 - Leg press <25% body weight to fatigue (<70^o knee flexion).
- Avoid resisted isolated hamstrings exercises.
- Swimming with avoidance of breast stroke kick until 4/12.

16 weeks +

- Add resistance to static bike and **start OKC hamstrings**.
- Advance through ACL class progressions as able.
- Jogging once patient can perform 20 single leg squats >60^o flexion.
- Progress to ACL speed, agility, quickness and plyometric drills gradually. Consider sports specific movements.

9 months +

• Gradual return to contact sports if >85% of good leg on functional testing.

References

Lunden et al (2010) Current Concepts in the Recognition and Treatment of Posterolateral Corner Injuries of the Knee, *Journal of Orthopaedic & Sports Physical Therapy*. Vol: 40 (8), pp 502-515.

Van Grinsven et al, (2010) Evidence-based rehabilitation following anterior cruciate ligament reconstruction, *Knee Surg Sports Traumatol Ar*

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