

# Trochleoplasty Protocol (+/- MPFL +/- Osteotomy Protocol)

## **Immediately post-op (O/P physio arranged for 1/52)**

- Cricket splint applied in theatre (may be changed to long lever brace locked at 0°)
- Pain relief (Ice) and swelling management (Elevation and Compression)
- Check for distal neurovascular deficit (including DVT + ACS) and infection
- Gentle passive knee flexion and extension 0-100°. Brace can be opened to allow ROM.
- TAQ's, SLR, isometric hamstrings (no resisted knee extension)
- Patella mobilisation (superior/inferior, medial/lateral)
- Gentle hamstring, calf, TFL + glutes stretches
- PWB using crutches for 3/52 (progress to WBAT) in hinged knee brace (locked at 0°)
- Heel raises

**Goals: >30° knee flexion by 2/52 post op, >90° by 6/52**

## **6 – 12 weeks**

- Wean off cricket splint/long lever brace
- Small arc CKC ex's (e.g. small knee bends, step ups)
- Encourage correct alignment of CKC ex's (**avoid valgus/external rotation at knee**)
- Weight bearing proprioceptive exercises.
- Static bike, no resistance
- Continue ROM towards full flexion

**Goals: FROM by 12/52 post op.**

## **12 weeks +**

- Avoid CKC ex's > 90° knee flexion
- Add resistance to static bike
- Progress proprioception to balance/wobble board
- Eccentric single leg CKC ex's **ONLY** if sufficient lower limb control
- Add quads stretches if required
- Start running if no swelling, FROM and sufficient quads, as comfort allows.

## **16 weeks +**

- Add hopping control ex's and multi-plane agility activities (if required)
- Return to training for specific sports (if required).

## **6 months +**

- Earliest return to full sport.

## References:

Fisher, B. et al (2010) Medial patellofemoral ligament reconstruction for recurrent patellar dislocation: a systematic review including rehabilitation and return-to-sports efficacy, *Arthroscopy*. Vol; 26 (10), pp 1384-1394.

DeJour et al (2013) The Lyon's sulcus-deepening trochleoplasty in previous unsuccessful patellofemoral surgery, *International Orthopaedics (SICOT)*. Vol 37; pp 433–439.

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