

PHYSIOTHERAPY PROTOCOL

MACI – PATELLOFEMORAL JOINT



queensland
combined
orthopaedic
specialists

1 – 3 WEEKS

- Motion:** Limited to 0 to 20° first 1–2 weeks to 30° by 3 weeks. Avoid active range of motion in weight bearing, eg sit to stand and ascending or descending stairs.
- Bracing:** To be worn at all times except during supervised range of motion activities, and showering. Home exercises should be performed whilst wearing the brace.
- Weight bearing:** 20% weight bear depending on size/location of lesion.
- Ambulation:** 2 crutches toe touch pressure maximum 20% of body weight through operated limb.
- Strengthening:** Isometric quadriceps to maintain tone and VMO function

3 - 6 WEEKS

- Motion:** Range of motion is to be gradually increased so that patients attain 90° of flexion by the end of the 6th post-operative week. Depending on the location of the lesion this may need to be more conservative ie: at the 70–90° range for uncontained lesions and those on the medial and proximal facet of the patella.
- Bracing:** To be worn at waking hours, may be removed at night. Range of motion stoppers to be set at 0–5° to prohibit excessive patellofemoral contact during ambulation.
- Weight bearing:** Partial weight bearing (progress 20% to 60%).
- Ambulation:** 2 crutches, with load bearing increasing to 60% weight bearing outdoors. Patient may stand evenly weighted from the end of the 4th week.
- Strengthening:** Closed chain within appropriate range.

6 - 8 WEEKS

- Motion:** Range of motion is to be gradually increased so that patients attain 90° of flexion by the end of the 6th post-operative week. Depending on the location of the lesion this may need to be more conservative ie: at the 70–90° range for uncontained lesions and those on the medial and proximal facet of the patella.
- Bracing:** To be worn at waking hours, may be removed at night. Range of motion stoppers to be set at 0–5° to prohibit excessive patellofemoral contact during ambulation.
- Weight bearing:** Partial weight bearing (progress 20% to 60%).
- Ambulation:** 2 crutches, with load bearing increasing to 60% weight bearing outdoors. Patient may stand evenly weighted from the end of the 4th week.
- Strengthening:** Closed chain within appropriate range.

12 WEEKS - 6 MONTHS

Motion:	Full range of motion.
Bracing:	When required, ie: uneven ground/lifting weight.
Weight bearing:	Full weight bear, no aids.
Ambulation:	Without aids as tolerated. It is suggested that reciprocal stair climbing not be commenced until 6 months post surgery.
Strengthening:	Cycling, straight leg raise, walking.

6 - 12 MONTHS

- Graded increase in stresses with maturation and hardening of the chondral regeneration.
- Soft sand walking, light jogging, proprioceptive exercises.
- Return to competitive sport suggested after 1 year.
- Return to work can occur as early as 3 weeks depending on demands of job. Three weeks would be sedentary work.