



POST-SURGICAL KNEE CARTILAGE REPAIR REHABILITATION PROTOCOL:

This is an outline of the major exercises that are commonly incorporated. Individual patient response should be considered and therefore modifications may need to be made. Communication should be made to the Surgeon if concerns arise during rehabilitation

The overall goals of the reconstruction and rehabilitation are to:

- Control joint pain, swelling, hemarthrosis (minimal or none).
- Regain normal knee flexion and extension.
- Regain a normal gait pattern and neuromuscular stability for ambulation.
- Regain normal quadriceps, hamstring lower extremity muscle strength.
- Regain normal proprioception, balance, and coordination for desired activities.
- Achieve optimal functional outcome based on orthopaedic and patient goals.

POST-OP DAYS 1 - 7 (20REPS)

GOALS:

- ✓ Pain reduction
- ✓ Full active extension.
- ✓ Flexion to 90 degrees.
 - o Good quad control.
 - o Ankle toe movements/ calf pumping.
 - o Isometric quads.
 - o Gradually pain free active assisted knee bending 60-90 degrees.
 - o Active knee extension.
 - o Straight leg raise (SLR).
 - o Active dynamic knee extension edge of the bed (90-0).
 - o Abduction and adduction ROM at hip.
 - o Ice Pack application 15mins every 3hours with knee in full extension, compression and elevation.
 - o Walking on walker with long knee brace accordingly.

DAYS 8 – 14 (20REPS)

GOALS:

- ✓ ROM 0-120 degrees.
- ✓ No effusion.
- ✓ No extensor lag.
 - o Ice application as prescribed.
 - o No active hamstring exercise.
 - o Active knee bending 90- 120 degrees.
 - o Active knee extension.
 - o Active dynamic knee extension edge of the bed (90-0 degrees).
 - o Isometric quads and dynamic VMO strengthening.
 - o SLR
 - o Glutes, hip abductor and adductors strengthening.

Orthopaedic Arthroscopy Knee & Shoulder Clinic (OAKS)



- o Heel and toe raises.
- o Walking with tripod stick support.
- o Staircase climbing.

WEEKS 2 – 6 (accordingly)

GOALS:

- ✓ Full ROM
- ✓ Normal Gait
 - o Active full range knee bending.
 - o Co-contraction quads and hamstring.
 - o Continue appropriate previous exercises.
 - o Mini squats and wall squats 0-45degrees.
 - o Standing SLR and hip movements with light Theraband bilaterally.
 - o Forward, lateral and retro step downs in parallel bars
 - o Walking without support with hinge knee brace.

WEEKS 6 – 12

GOAL:

- ✓ Walk 3 miles at 15 min/mile pace
 - o D/C Brace.
 - o Continue appropriate previous exercises.
 - o Wall squats 0-90 degrees.
 - o Proprioceptive training – Single leg BAPS, ball toss and body blade.
 - o Stationary bike – 10-15 minutes at a time.
 - o Treadmill – Walking progression program.
 - o Elliptical trainer.
 - o Pool therapy – Walking / running (no kicking)

WEEKS 12 and Beyond

GOAL:

- ✓ Run 2 miles at easy pace.
- ✓ Return to all activities.
 - o Continue appropriate previous exercises with progressive resistance.
 - o Slide board.
 - o Proprioceptive training – Grid exercises.
 - o Functional activities – Figure 8s, gentle loops, large zigzags.
 - o Treadmill – Running progression program if cleared.

Orthopaedic Arthroscopy Knee & Shoulder Clinic (OAKS)



Dr. A. M. RAJANI

M.S Orth (Gold Medallist), D-Orth, MBBS
Hon Asst Prof Orthopaedics - Grant Medical College & J J Group of Hospital
Consultant Knee & Shoulder Surgeon

Let's Begin to Live Again...

- Pool therapy – swimming laps.
- Quad stretches.

Orthopaedic Arthroscopy Knee & Shoulder Clinic (OAKS)

1, Court House, 1st Floor, Above Reliance World, Opp St. Xavier's School, Marine Lines, Mumbai - 02. India.
Tel. : +91 22 22 09 1976 | Cell : 98207 09137 | Email : dramrajani@gmail.com | Web: www.dramrajani.com
For Appointments: +91 88989 75355