



PATELLAR TENDON REPAIR

REHABILITATION PROTOCOL

REHABILITATION PROGRESSION

The following is a general guideline. Please consult Dr. Syal/Dr. Soswa if there is any uncertainty concerning advancement of a patient to the next phase of rehabilitation. Rehabilitation should be individualized according to patient status.

PRECAUTIONS

- supervised physiotherapy is expected for approximately 2-6 months
- hinged rehab brace to be worn immediately post-op or once able to fit, and continued for duration of rehab
- bathing/showering without brace after 14 days
- use crutches to weight bear for 2 weeks

PHASE I (WEEK 0-2)

- allow healing of soft tissue & keep wound dry for 2 weeks
- hinged knee brace immobilization: knee locked in extension
- immediate full weight bearing initiated with crutches
- isometric quadriceps and hamstrings exercises
- maintain uninvolved joint mobility (hip, ankle, & foot)

PHASE 2 (WEEKS 2-6)

- wound assessed, sutures removed
- start closed kinetic chain exercises for quads, hamstrings & calf muscles – in gravity eliminated plane or with support
- ROM 0° to 120°, advance of 30° every 2 weeks
- ROM hinged brace gradually unlocked to meet increases in flexion
- cryotherapy for knee & modalities for inflammation as needed

PHASE 3 (WEEKS 6-16)

- hinged knee brace discontinued
- use of lateral buttress knee sleeve or PF stabilizer brace
- supervised isokinetic strengthening program initiated
- start treadmill (forward)
- proprioceptive exercises (start bilaterally and progress to unilateral)
- continue with closed kinetic chain exercises
- wall squats, knee extension in pain-free arc, bicycle
- resumption of strenuous athletic activity prohibited until 6 months



PHASE 4 (MONTHS 16-24)

- continue with ROM, strengthening, endurance and functional activities
- can initiate open kinetic chain exercises (to full knee extension)
- initiate plyometric program as appropriate for patient's functional goals
- return to sporting/work or unrestricted activity allowed with following criteria met:
 - full knee ROM
 - 85-90% of strength of contralateral knee obtained with isokinetic strength testing

SOURCES:

- Matava, M. Patellar Tendon Ruptures. J Am Acad Orthop Surg 1996;4:287-296.
- Tsai, A.M. Chapter. 7 Patellar Tendon Repair. Jackson, D.W. (Editor) Master Techniques in Orthopaedic Surgery: Reconstructive Knee Surgery, 3rd Ed. Lippincott Williams & Wilkins, 2008.