



Patellar/Trochlear Autologous Chondrocyte Implantation with Anteromedialization Osteotomy (AMZ)

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Patient Name	Date of Surgery
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Procedure: Right Left Knee Patellar Trochlear ACI with AMZ

Evaluate and Treat – no open chain or isokinetic exercises

Provide patient with home exercise program

Phase I (0-6 wks): *Period of protection.*

- **Toe-Touch Weight bearing (20%) with brace and crutches.** Hinged knee brace should be worn at all times except for PT and hygiene. During ambulation, brace should be locked in extension for weeks 0-4, then unlocked for 0-30° for weeks 4-6.
- **ROM:**
 - CPM 4-6 hrs/day (starting 24 hrs after surgery):
 - 0-30° *only* x 1st 3 weeks, then advance 5-10°/day as tolerated.
 - Goal: full extension by week 1, flexion to 120° by week 6
 - Gentle passive ROM 0-30° x 1st 3 wks, then match CPM progression thereafter; home supine extension stretching with pillow under foot and weight on distal thigh. No prone heel hangs.
 - *Starting 1 week after surgery, let knee passively hang over table/bed to 90° three times per day for 5 minutes (each time) to prevent stiffness. No active knee extension.*
- **Strengthening:** quad sets, co-contractions, isometric quad/hamstring strengthening in extension. No active extension.

Phase II (6-12 wks): *Transition phase.*

- **Transition to full weight bearing, weaning from hinged knee brace once quad control (no limp and no extension lag on SLR).** Full weight-bearing and D/C brace by week 8.
- **ROM:** D/C CPM and progress to full active and passive ROM; goal: full ROM by 8-10 weeks. Aggressive stretching at end-ranges if FROM not achieved by 10 weeks.
- **Strengthening:** Continue prior exercises, adding in SLRs. Can begin partial wall sits and then advance to other closed-chain strengthening (with knee bent no more than 40 degrees) once full weight-bearing.

Phase III (3-18 months): *Maturation phase.*

- **ROM:** Continue active and active-assisted ROM.
- **Strengthening:** Progress closed-chain patellofemoral strengthening without limits. Begin treadmill walking at a slow pace and progress to balance/proprioception.
- Light plyometrics and jogging can be initiated at 4 months, starting with 2 minute walk/2 minute jog on level surface (no hills).
- At 6 months: begin progressive running (still on hills) and sport-specific drills.
- **High-impact activities (jumping, contact sports) allowed only after 9-12 months if pain free.**

Other:

Modalities

Heat before/after

Electrical Stimulation

May participate in aquatherapy after week three, begin aqua-running week 6

Ultrasound

Ice before/after exercise

Frequency: _____ x/week x _____ weeks

By signing this referral, I certify that I have examined this patient and physical therapy is medically necessary.

This patient _____ would _____ would not benefit from social services.

Physician Signature	Date
Printed Name	