



Indiana University Health

IU Health Physicians Orthopedics & Sports Medicine

ANTERIOR CRUCIATE LIGAMENT (ACL) AVULSION REPAIR

PHYSICAL THERAPY PROTOCOL

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Patient Name:

Date:

Procedure: Right/Left ACL Avulsion Repair

Associated Procedure (circled if applicable): Meniscectomy/Meniscal Repair

___ Evaluate and Treat – no open chain or isokinetic exercises

Provide patient with home exercise program

Frequency: ______x/week x _____ weeks



• Focus on the protection of fixation in Phase I (0-6 weeks postop).

- Brace: 8 weeks total
 - Weeks 0-4: Non-Weight Bearing (Full Extension)

 $^\circ$ Weeks 5-6: Toe-touch weight-bearing with transition to Weight-bearing as tolerated and d/c of crutches at end of 6 weeks (Full Extension)

• Weeks 7-8 (Unlock brace in 30 degree increments, unlocked and off after week 8)

• Sleep with brace ON & LOCKED in extension for 3 weeks.

• Crutches: 4 weeks total (0-4 NWB, 5-6 TTWB with transition to WBAT at 6-week mark)

Phase I: Weeks 0-6

Goals:

- Protect fracture fixation with the use of brace and specific exercises.
- Minimize effects of immobilization, inflammation & edema (ice x2 weeks)
- Advance to Full WB, wean off crutches, obtain motion

Brace:

- $^\circ$ Weeks 0-4: Brace locked in full extension for ambulation & sleeping.
- Weeks 5-6: TTWB in extension. OK to d/c brace when sleeping.

 $^\circ$ Weeks 7-8: WBAT. Begin unlocking in 30 degree increments every 3-4 days. Unlock by the start of Week 8 and d/c after Week 8.

Weight-Bearing:

• Weeks 0-4: NWB



 Weeks 5-6: TTWB. At the 6-week mark, wean from crutches and transition from protected weightbearing to weight-bearing as tolerated as patient demonstrates normal gait mechanics and improved quad control.

Range of Motion:

- PT begins POD#3 to 7
- CPM Machine beginning POD#1
- AAROM \rightarrow AROM as tolerated
- $^{\circ}$ Maintain full extension and work on progressive knee flexion.
 - 0-90 degrees by Week 3
 - 0-125 degrees by Week 6

Exercises:

- Patellar mobilization/scar mobilization
- Quad sets, Hamstring curls, Heel slides
- Non-weight bearing stretching of Gastro-Soleus

 \circ Straight-leg raise with brace in full extension until quad strength returns (no extension lag)

Phase II: Weeks 7-12

Goals:

- Maintain full extension, obtain full flexion
- Increase hip, quadriceps, hamstring and calf strength
- Increase proprioception

Brace:

 $^\circ$ Begin unlocking in 30 degree increments (every 3-4 days) after Week 6. Unlocked when weight bearing by the start of Week 8.

• Discontinue after Week 8 (once patient has full extension and no lag).



- Begin stationary bike
- ° Continue with ROM/flexibility exercises as appropriate
- Closed chain extension exercises
- Weight bearing Gastroc-Soleus stretching
- Toe raises, start proprioception program

Phase III: Weeks 13-18

Exercises:

- Begin straight-ahead, treadmill running after Week 16
- ° Continue flexibility and ROM exercises as appropriate for patient
- Progressive hip, quad, hamstring and calf strengthening
 - Mini-Wall Squats (0-60 degrees)
 - Lateral Lunges & Step-Ups
 - Hip Abduction/Adduction
 - Short-Arc Leg Press
- Cardiovascular/endurance training via stair master, elliptical and bike
- Advance proprioceptive activities and agility drills

Phase IV: Months 5-6 - Return to Sport

Exercises:

- Progress flexibility/strength program based on individual needs/deficits
- Initiate plyometric program as appropriate for patient's athletic goals
- Agility progression including:



- Side steps + Crossovers, Figure 8 and Shuttle Running
- One & Two Leg Jumping
- Cutting/Accelerative/Deceleration/Springs, Agility Ladder Drills

 $^\circ$ Continue progression of running distance based on patient needs

- Sport-specific drills as appropriate for patient
- Gradual return to activity as tolerated

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.

Date:_____

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