



## Medium to Large Trochlear or Patellar Chondral Lesion Rehabilitation

\*\*\*No quad activities x 6 weeks\*\*\*

### Phase 1: Maximum Protection Phase (Weeks 1-4)

**Goals:** Control inflammation/effusion  
Allow early healing  
Full passive knee extension  
Gradually increase knee flexion  
Independent quad. Control

#### Stage 1: Week I

- Ice, compression, elevation
- Brace locked at 0 degrees for ambulation and sleeping only
  - Brace may be unlocked during sitting etc.
- PROM (Passive 0-45)
- Strengthening exercise:
  - Hamstring digs
  - SLR Extension
  - Hip Abd/Adduction
- ***Weight Bearing in Locked Brace x 6 weeks***

#### Stage 2: Weeks 2-4

- Continue use of ice and compression
- Brace locked for ambulation
- ROM Guidelines
  - Gradually increase PROM
  - Week 2: 0-90 degrees
  - Week 3-6: 0-100 degrees
- Strengthening Exercises:
  - SLR (all 4 planes)
  - Knee Flexion only
  - Heel Slides to 90
  - Begin Pool Program

### Phase 2: Moderate Protection Phase (6-8 weeks)

**Goals:** Full PROM  
No Swelling/inflammation  
Re-establish muscle control  
Proper gait pattern

- Begin Gait Training
- Continue use of ice and compression

- Continue PROM and progress to 0-135 Degrees
- Progress strengthening exercises Phase I
  - Heel slides to full ROM
  - Long sit hamstring stretch
  - Knee extension 90-0 Degrees
  - Standing hamstring curls
- Begin Level Two agility
  - Cup walking
  - Planks
  - Bridging
  - Steamboats 4 way (involved leg down)
  - Ball roll: for, side and back (involved leg down)
  - Heel raises
- Light strengthening: Short range leg press, 4-Way hip, leg extension 90-45, Dead lifts
- Bicycle (as ROM permits)
- Pool Program

*\*Avoid* twisting, deep squatting, stooping, no lunges!!!  
pivoting, running and deep squatting

### Phase 3: Controlled Activity Phase (9-16)

**Goals:** Improve strength and endurance  
Maintain Full ROM  
Gradually increase applied stress

#### Week 9 -11

- Continue all strengthening exercises listed above
- Initiate Dynamic warm-up (no lunge)
- Initiate Form Stepping (progress from walk pace to fast step pace and no lunge)
- Initiate light resistive hamstring curls
- Toe calf raises
- Progress balance training
- Progress to Phase II strengthening program

#### Week 12 –week 15

- Continue Strengthening and stretching program
- Continue dynamic warm-up (now can include lunges)
- Form running: progress from fast pace walk to trot to jog pace (now include lunges)
- Initiate treadmill for endurance (3.5mph fast walk then progress to light jog at 14 weeks)
- Begin step ups and step downs
- Initiate pool running



#### **Phase 4: Return to Activity Phase (4-6 month)**

**Goals:** Improve strength and endurance  
Prepare for unrestricted activities

##### Criteria to Progress to Phase 4

- Full non-painful ROM
- No pain or tenderness
- Satisfactory clinical exam

##### Exercises

- Continue and progress all strengthening exercises and stretching drills
- Initiate straight line running at 5 months
- Initiate controlled pivoting and cutting: 6 months
- Deep squatting permitted at 6 months
- Initiate controlled agility training: 6 months
- Initiate jumping program at 8 months: Ankle jumps, two-legged hop, two –legged jumps, single leg, etc...
- Gradually return to sport drills at : 9 months
- Non contact practice 8 months
- Full competition non contact sports 9 months
- Full competition full contact 10 to 12 months