

GARRETT COUNTY ORTHOPAEDICS

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**Chronic Patellar Tendinosis (Jumper's Knee)
& Osgood-Schlatter's Excision**

Brace: Knee immobilizer or hinged range-of-motion (ROM) brace

1. Wear at all times while in bed (maintain full extension)
2. Ambulate in immobilizer or locked ROM brace (0°) until quads strong
3. Remove knee immobilizer or ROM brace for rehabilitation exercises

PHASE I: Hospital d/c through Week 6 – PROTECTION PHASE

PT Sessions: Directed by physical therapist

Ambulation: Crutches –WBAT; d/c when WBAT with immobilizer in place as tolerated

Brace: Knee immobilizer

1. Wear at all times when ambulating (maintain full extension)
2. Remove knee immobilizer for rehabilitation exercises
3. Discontinue after 6 weeks

Exercise: *(followed by 20 min ice with towel under heel cord – full extension)*

1. Calf / ankle pumps
2. Static quad sets or straight leg raises (SLR) in full extension
3. Passive extension / active flexion (PEAF) or heel slides with assist
4. **No active knee extension for the first 6 weeks post-op, passive only**
5. Heel slides x 30
6. Prone hangs 5-10 min
7. Gentle hamstring (HS) stretching and multi-angle HS isometrics
8. Patellar mobilizations
9. Hip strengthening

Goals and Criteria for Progression to PHASE II:

1. Full passive ROM and good patella mobility
2. Good straight-leg raise (SLR)
3. Pain under control and minimal effusion

PHASE II: Week 6 through Week 12 – STRENGTHENING PHASE

PT Sessions: Directed by physical therapist

Ambulation: Crutches should be discontinued

Brace: none required

Exercise:

1. Continue with PHASE I exercises, including **full active ROM**

2. Initiate **closed chain** strengthening when gait is normal
 - a. mini squats (if no pain or crepitus)
 - b. heel raises and heel to toe rocking
 - c. single leg press 25% of body wt
 - d. **AVOID active, open-chain quad extension**
3. Initiate cardiovascular exercise
 - a. stationary bike for ROM (low resistance, seat high)
 - b. treadmill walking – forward
 - c. elliptical trainer
1. Proprioception drills:
 - a. single body blade
 - b. BAPS board (progress through levels w/ eyes open & closed)
 - c. plyoback training
2. Aquatic (pool) therapy
 - a. pool walking – forward and lateral
 - b. flutter kicks (knee remains extended)
 - c. weightless jogging

Goals and Criteria for Progression to PHASE III:

1. Full AROM (95% strength of uninjured knee)
2. Normal quad and HS control; no quadriceps extension lag
3. Minimal pain; no effusion
4. Normal patellar mobility

PHASE III: Week 12 through Week 18 – ADVANCED STRENGTHENING PHASE:

PT sessions: Directed by physical therapist

Exercise:

1. Continue with PHASE II exercises
2. Muscle strengthening
 - a. Leg press progression up to 50% of body weight (single leg)
 - b. Quad and HS strengthening – exercise to muscle failure
3. Cardiovascular exercise:
 - a. Retro-walking on treadmill (2mph @ 1% grade – progress prn)
 - b. Add resistance to stationary bike at 60 RPM (if no pain / crepitus)
 - c. Jogging (50-75% normal pace) on level surfaces – progress prn
 - d. *No cutting, jumping, twisting, or contact sports*
4. Advanced pool therapy
 - a. Treading water
 - b. Kickboard swimming
 - c. Pool running, shuffling, and carioca
 - d. Modified aquatic sports

Goals and Criteria for Progression to PHASE IV:

1. Jogging for 20 min at normal pace w/o pain, swelling, giving-way
2. No effusion

PHASE IV: Week 18 through Week 24 –BASIC FUNCTIONAL TRAINING:

PT sessions: Directed by physical therapist

Exercises:

1. Continue with PHASE III exercises with increasing weight
2. Progress leg presses up to 75% of body weight
3. Begin leg extension machine from 90-45° only (if no pain or crepitus)
4. Agility and advanced proprioception exercises
5. Jumping / hopping progression
6. Jogging (100% normal pace) & Directional running (50-75% speed)

Goals and Criteria for Progression to PHASE V:

1. Jogging for 20 min at normal pace w/o pain, swelling, giving-way
2. No effusion

PHASE V: 6 Months + -- ADVANCED FUNCTIONAL TRAINING

When rehabilitation goals are met

1. Initiate straight line running when walk & slow jog is normal
2. Functional hop test as appropriate when running is normal
3. Functional progression to cutting and jumping
3. Begin full body weight. plyometrics prn
4. Return to sports prn when full strength and agility achieved

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