

Non-Operative Patellar Dislocation Protocol

Weeks 0-2:

- Brace in full extension at all times, WBAT in brace

Week 2-6:

- Supervised PT- 3 times a week (adjust based on insurance needs)
- Gentle patellar mobilization exercises
- Emphasis on full passive extension
- AAROM exercises (4-5 times daily) no limit ROM
- ROM goal 0-115
- Flexion exercises PROM, AAROM, AROM with brace off
- Stationary bike for range of motion (short crank or high seat, no resistance)
- Hamstring and calf stretching
- Mini-squats (0-45) and heel raises
- Hip strengthening-specifically ER
- Isotonic leg press (0-60 degrees)
- D/C brace and advance to patellar stabilization brace if quad control adequate and swelling appropriate (usually week 5-6)
- Progressive SLR program with weights for quad strength with brace off if no extensor lag (otherwise keep brace on and locked)
- Theraband standing terminal knee extension
- Proprioceptive training bilateral stance
- Hamstring PREs
- Double leg balance on tilt boards
- 4-inch step ups
- Seated leg extension (0-90 degrees) against gravity with no weight
- Add water exercises if desired

Week 6:

- Continue all exercises
- Continue ROM stretching and overpressure into extension
- Initiate retro treadmill with 3% incline (for quad control)
- Regular stationary bike if flexion > 115
- Wall and/or ball squats
- 6-inch front step ups
- 4-inch step downs

- SLR's in all planes with weight
- Goal ROM 0-12

Week 7:

- Continue above exercises
- Self ROM 4-5 times/day using other leg to provide ROM
- 8-inch step ups
- 4-inch step downs
- Single leg proprioceptive training
- Lateral step out with therabands
- Retro treadmill progressive inclines
- Sportcord (bungee) walking
- Increase resistance on stationary bike

Week 8:

- Continue above exercises
- Stair master machine
- Brisk walking
- Progress balance and board throws
- 6-inch step downs

Week 9:

- Bike outdoors or on level surfaces only
- Start slide board
- Plyometric leg press
- 8-inch downs

Week 10:

- Should have normal ROM (equal to opposite knee)
- Begin resistance for open chain knee extension
- Jump down's (double stance landing)
- Progress to running programs and light sport specific drills if:
 - Quad strength @ 75% contralateral side
 - Active ROM 0-125 degrees
 - Functional hop test > 70% contralateral side
 - Swelling < 1 cm at joint line
 - No pain
 - Demonstrates good control on jump down

Week 11-12

- If full ROM, quad strength @ 80% contralateral side, functional hop test @ 85% contralateral side, satisfactory clinical exam:
 - Progress to home program for running, start backward jogging, figure of 8, zigzags and lateral shuffles
 - Progress to hops, jumps, cuts and sports specific drills. Begin to wean from supervised therapy.
 - Criteria to return to sports and to d/c patellar stabilization brace
 - Full active ROM
 - Quad and hip ER strength > 90% contralateral side
 - Satisfactory clinical exam
 - Functional hop test > 90% contralateral side
 - Completion of running program

This is strictly an outline of most of the major exercises that we would like to incorporate into the patellofemoral rehabilitation. Not all exercises need to be done. Two main goals are that appropriate progress is made on a weekly basis, and that communication exists between patient, therapist, and doctor.