



Purpose:

This guideline is designed to return the individual to their full activities as quickly and safely as possible following a Patellar Dislocation. Modifications to this guideline may be necessary dependent on physician specific instruction or other procedures performed. This evidence-based Patellar Dislocation guideline is criterion-based; time frames and visits in each phase will vary depending on many factors. The therapist may modify the program appropriately depending on the individual's goals for activity following Patellar Dislocation.

This guideline is intended to provide the treating clinician a frame of reference for rehabilitation. It is not intended to substitute clinical judgment based on exam/treatment findings, individual progress, and/or the presence of concomitant procedures. If the clinician should have questions regarding progression, they should contact the referring physician.

Precautions:

- Timeline expected 10-16 weeks for general healing
- Immediate immobilization or mobilization is controversial at this time
 - Immediate mobilization places the individual at 3x higher risk of re-dislocation compared to being immobilized
 - Immobilization for 6 weeks did result in a greater risk in knee ROM restriction (research study by Maenpaa and Lehto)
- Guideline is dependent on immobilization period for 3 or 6 weeks

PHASE	SUGGESTED INTERVENTIONS	MILESTONES FOR PROGRESSION
Phase I: Acute Weeks 1-6	WB Status: • Use of crutches with WBAT using knee immobilizer at 0° or patella stabilizing brace • May unlock brace at 3 weeks to available pain-free ROM. • May wean from brace and taping as quadriceps function improves — Approximately week 6 Therapy: • Heel slides • Quad sets • SLR • 4-way hip • VMO activation exercises • Isometric hamstring set • NMES for quad activation • Balance/proprioception starting with double leg stance • Modalities for reduction of effusion and pain relief • Patellar mobilizations for proper patellar tracking	Goals: • Control pain • Reduce effusion • Improve quadriceps contraction • Gradually progress knee ROM Criteria to Advance: • Proper quad control, no extensor lag • FWB status and normal gait pattern • No buckling of the knee when walking



	• Calf/hip/core strength exercises in unloaded position • Exercise examples to add after immobilization period: — May use NuStep or bike for ROM purposes after immobilizer has been removed — SAQ (10°-0°) and LAQ (90° to 50°) — Isometric clam shells — Bridging with ball squeeze • Manual: — STM — Manual lymphatic drainage — McConnell taping technique	
Phase II: Intermediate Weeks 4-9	WB Status: • FWB — Wean from crutches as appropriate — May wean from brace and taping as quadriceps function improves ⇒ Approximately week 6 Therapy: • Closed kinetic chain exercises: — Total gym/leg press — Partial squats — Step ups — Back squat — Single leg squat — Forward and backward lunges — Heel raises • Single leg balance • Glute/core strengthening to prevent knee valgus deformity • Patellar mobilizations for proper patellar tracking • Patellar taping as needed • Balance: — Static wobble board — Dyna disc — BOSU ball — Cone touch • LAQ through full ROM	Goals: • Return to full knee ROM • No quadriceps extension lag • Improve knee proprioception and control • Improve muscular strength and endurance • May discharge at end of this phase depending on patient population and return to functional activities without pain Criteria to Advance: • Full active and passive ROM • No pain with activities • Proper body mechanics with exercises — Control demonstrated through hip, knee and ankle



	Alter-G, elliptical, treadmill, bike	
Phase III: Advanced Weeks 7-12	Therapy: - Elliptical, treadmill - Squats - Multi-directional lunges - Step-ups - Single leg isotonic exercises - Single leg dynamic balance activities - Agility drills and plyometrics - Pogo hops (double and single) - Box jumps - Even ground jumps and bounds - Drop jumps - Depth jumps ⇒ Progressively increasing loads of plyometrics until return to sport - Power clean and snatch - Med ball slams - Push press - Banded jumps	Goals: - No effusion - No pain with functional activities - Proper form with functional exercises - Improve muscular power, strength and endurance - Return to strength training with appropriate modifications - Proper landing and jumping mechanics to reduce risk for reinjury Criteria to Advance: - All above goals met
Phase IV Weeks 10-16	Therapy: - Sport-specific drills - Cutting - Pivoting - Lateral shuffle drills - Cone drills (M, X, box patterns) - Hurdles - Shuttle drills - Progressing lower body strength and power training programs as well as impact training with plyometric activities - Return to running - Consider Return to Sport/Activity & Discharge Criteria	Goals: - Full strength with MMT - Within 85-90% of opposite L/E with Y-balance test or single leg jumping tests and two legged hop test, if appropriate - Progression of direction changes for sport-specific drills with proper lower body mechanics - Individualized maintenance program in preparation for discontinuing rehab Return to Sport: - No fear avoidance during running, cutting, and jumping - Passing return to sport testing/criteria