

Knee Rehab after Regenexx ACL partial tear repair procedures.

	Restrictions	Therapeutic Exercise	Progress to next phase when:
Phase I: Max Protection, ROM, light strength training, gentle balance training Week 0-4	ACL brace for 4-6 weeks pending MD recs. No plyometrics, cutting movements, or lateral movements. No running.	Stationary bike & elliptical in brace. Swimming. Gentle Isometric quad sets, hip abductor and core strengthening. Pool jogging ok (chest depth) 30-45min 3-5x/wk x 2 months.	At least 4 weeks Able to perform all exercises with less than minimal 2/10 pain
Phase II: Advanced Resistance training, Strengthening Balance Week 4-8	Can discontinue brace per MD recs. No plyometrics or cutting movements. Back off any activity that causes more than minimal pain 2/10 during or after exercise or feeling of instability.	Begin resistance training: light squats, leg press, core, hip abductor and hamstring strengthening. Balance board exercises Can begin straight jogging at 4 wks if not painful Progress to: Combine strength and balance exercises (ball toss on balance board or trampoline) Single leg exercises: calf raises, squat, dead lift. Shuttle jumping	Able to perform all exercises with no more than 2/10 pain and no feeling of instability x 1 week Single-leg stance 60 sec (eyes closed) Single-leg squat 20 reps (60° flexion) MRI showing ligament healing
Phase III: Guided sport specific training. Week 8-16	Back off any activity that causes more than minimal pain 2/10 or instability during or after exercise. Use brace to start off.	1. 2 leg to single-leg jumps 2. Progressive plyometrics 3. Speed, agility, and cutting drills 4. Controlled sport specific movements	Return to sport once MD clearance and progressed to sports specific movements without pain for at least 1 week.
Phase IV: 4-9 months Return to Sport/ACL prevention program	No strict restrictions.	The Santa Monica Sports Medicine: PEP (Prevent Injury and Enhance Performance) program: http://smsmf.org/smsf-programs/pep-program Neuromuscular rehab to demonstrate correct form (good knee, hip, pelvic, and trunk stability) with Step Down, Drop Jump, Lateral Shuffle, Deceleration, Triple jump, and Side step-cut.	Only return to full sport with Dr. clearance after reviewing MRI, checking objective stability, and demonstrating correct neuromuscular control.

Note: Need repeat MRI at 3 months. Pending results may platelet booster injection or repeat stem cell procedure. If a second procedure then should repeat MRI at 6 months. Need objective ACL stability measurements before and after procedure with rolometer/telos or KT 1000.