



ACL PROTOCOL

Phase 1: (2-4 weeks)

- D/C crutches 1-7 days
- Work on active and passive range of motion. Full range of motion unless meniscal repair then 0-90 degrees for 4 weeks.
- Normal gait with brace on
- Compression stocking TED or Truform (20-30 mmHg)
- Unlock brace 3-14 days
 - » Good quad set o Within 2 degrees of full Ext
 - » Wt. bearing control (SLS 5 sec no brace)
 - » Double mini squat with equal wt. distribution through 30 degrees of flex
- Remove brace 1-4 weeks
 - » Normal gait with good quad control
 - » Wt. bearing control (SLS 10 sec no brace)
 - » No apprehension without brace during walking
 - » Progressively work out of brace

GOALS:

- Eliminate Swelling
- ROM
- Full Active Ext
 - » § No prone hangs with additional weight with hamstring graft
 - » At least 125 degrees of Flex
 - » Patellar Mobs
 - » Scar mobilization when adequate healing
- Muscle Activation
 - » Restore weight bearing leg stability
 - » Restore ability to lift leg in all directions actively
 - » § No hamstring sets with hamstring graft until six (6) weeks, then gradually progress hamstring strengthening as tolerated.
- Core Body Training
- Ambulation
 - » Normalize gait pattern with use of crutches and/or brace

Phase II: (Begins 2-6 weeks post surgery, goals attained in approx.3-5 weeks)

- ROM
 - » Achieve full active knee ROM (equal to uninvolved side)
 - » Start stretching program for: Hamstrings, IT Band, Gastroc/Soleus, Hip flexors/Quads
- Gait Drills
 - » Performed with slow and controlled motions
- Functional Strengthening
 - » Squat, Box steps (back), Stationary lunge
- Balance
 - » Increase balance and proprioception in all planes, Progress static to dynamic movement
 - » SLS progression
- Core Body
 - » Core progression
 - » Start Cardio without Ant. Knee pain
 - » Start UE strengthening, occupation or sport will determine this section

Phase III: (Begins 6-8 weeks. post surgery, attain goals in phase II prior to beginning)

- ROM
 - » Full active ROM is Expected
 - » Dynamic Agility Drills
 - » Develop dynamic flexibility to allow proper alignment during activities of increased speed
 - » Progress stride length and velocity as movement control improves
 - » Ex: Fwd, Bwd, Side skip, side shuffle, Carioca, start stop, back pedal acceleration, stationary fast feet, tall-fall-run
 - » Slide board at 10 weeks
 - » Plyosled at 12 weeks with and without meniscal repair
- Functional Strengthening
 - » Progress single plane to multi-plane exercises and functional exercises
 - » Prior to progression patient must display good alignment and control of multiplanar movements
 - » Develop eccentric muscle control
- Landing and Takeoff Drills (Not until 16 weeks)
 - » Step off 6-10 in. box with Dbl leg land into squat position. When performed consistently, correctly and without pain can progress to single leg landing
- Exercises: Step offs, bounce jumps, leap and land, jump stops.
- Balance
 - » Emphasize balance with postural control and duration in addition to multi-plane movements
- Core Body
 - » Advance core strengthening
 - » Design individualized Cardio and UE strengthening to individuals work/sport

Phase IV: (Begins 12-16 weeks post surgery) * Address confidence in dynamic movements

- Dynamic Warm up (5-15 minutes)
 - » Same drills as phase III but with larger size and speed of movement
- •Multi-planar Landing Control and Neuromuscular Reaction
 - » Progress from Dbl leg to Single leg impact control (Not prior to 8 wks)
 - » Progress to cutting and pivoting (not prior to 8 wks, or completion of Dbl leg progression)
 - » Progress to Jump Program dependent upon strength and physician release
- Functional Movements and Strengthening
 - » Progress to single leg and multi-planar movements with rotation
- Advanced Core Strengthening
 - » Progress to include progression of force from upper to lower body and vice versa, as well as, movements of extremities during stabilization

Phase V: Sports Performance and Injury Prevention

- Patient specific exercises for their sport/work demands. This phase progression to be discussed with Dr. Ryzewicz prior to starting
- ACL reconstruction—jogging on treadmill starting at 16 weeks (if strength adequate) and not until 16 weeks with ACL and Meniscal repair.
- Progress to running on flat track approximately 16 -20 weeks.
- ACL 16-20 weeks begin plyometric training.
- Strength within 10% of uninvolved before return to sport.
- These guidelines are even for the super motivated patient.