



**UCLA DEPARTMENT OF ORTHOPAEDIC SURGERY
SPORTS MEDICINE**

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ACL Insufficiency Protocol

Recovery/Recuperation Phase (I)

- ❑ Restore ROM
- ❑ Gait training: aquatic therapy if needed
- ❑ Quad isometrics
- ❑ Straight leg raise with/without weights
- ❑ Calf raises
- ❑ Hip PRE's
- ❑ Hamstring PRE's
- ❑ Stationary bike/ Nordic Track
- ❑ Closed chain activities: BAPS, half-squats, step-ups, leg press
- ❑ Balance work: emphasize hip, knee flexion; avoid valgus moment at knee; single-leg
- ❑ Core strengthening
- ❑ *ISOKINETIC TESTING WHEN PAIN-FREE*

Limited Return to Activities Phase (II)

- ❑ Progress endurance activities
- ❑ Add StairMaster, VersiClimber if available
- ❑ Quad isometrics, isotonic (90-40 degree arc), eccentrics
- ❑ Isokinetic training quads, hamstrings at high speed = 180-300 deg/sec
- ❑ Advance closed kinetic chain strengthening (i.e., one-leg squats)
- ❑ Progress proprioception activities (slide board, KAT, etc.)
- ❑ Begin jogging when quad torque injured side 60% of uninjured side
- ❑ Begin running and agility work when quad torque injured side 80% of uninjured side

Full Return to Sports Phase (III)

- ❑ Begin aggressive functional exercise, agility without contact
 - Jog/sprint progression
 - Forward, backward running, ½, ¾, full speed
 - Cutting, cross-over, carioca, etc.
- ❑ Neuromuscular control program
- ❑ Plyometrics