

## **PCL RECONSTRUCTION ALLO/AUTOGRAFT (Two tunnel technique)**

**\*NO ISOLATED HAMSTRING STRENGTHENING FOR 6 MONTHS**

### **Phase I – Protective Phase (0 – 6 weeks)**

**Goals:**

- Protect healing graft and decrease deleterious stresses
- Reduce pain, inflammation and swelling
- Maintain good quadricep control

**Weeks 0 – 3:**

- TDWB in immobilizer with crutches x 6 weeks
- PROM for knee flexion/extension from 0 - 60° (end of bed)
- Prone hangs/heel props to maintain full knee extension (0cm HHD)
- Patellar mobilizations
- Strengthening:
  - Quadricep sets
  - SLR's x 3 planes (flex/abd/add) in immobilizer if quad lag

**Weeks 4 – 6:**

- Increase PROM for knee flexion/extension to 0 - 90°
- Strengthening:
  - Begin quadricep isometrics @ 60°, 45°, 30°, and 15°
  - Begin open chain extension from 60° to 0°
  - Add weight to SLR's if patient can maintain good control and no lag

### **Phase II – Intermediate Phase – Gradual weight bearing (7 – 12 weeks)**

**Goals:**

- Promote gradual return to full weight bearing
- Promote return to basic ADL's
- Decrease residual pain



Home to the Texas Rangers

**Weeks 7 – 12:**

- PWB progressing to FWB over 2 weeks with immobilizer off (wean from crutches when no limp)
- Progress ROM to tolerance (gradual increase of 10 - 15°/week)
- Begin stationary cycling (high seat/low resistance/no toe clips)
- Begin basic balance/proprioception program when full weight-bearing
- Begin flexibility program as needed (HS, ITB, quads, calf)
- Strengthening:
  - Progress open chain quadricep PRE's from 90° to 0°
  - Start closed chain program when full weight bearing
    - Mini-squats (0 - 30°)
    - Forward/lateral step-ups
    - Shuttle (0 - 90°) with high reps/low resistance
    - Leg press (0 - 90°)

**Phase III – Protective Strengthening Phase (13 – 24 weeks)****Goals:**

- Increase strength and endurance of quadriceps
- Increase neuromuscular control

**Weeks 13 – 24:**

- KT 2000 test at 70 degrees of flexion
- Continue ROM/flexibility program
- Increase intensity of balance/proprioception program
- Strengthening:
  - Continue closed strengthening and isolated isotonic quadriceps
  - Begin isokinetic strengthening (Quadriceps ONLY)
- May begin swimming, walking, and stairmaster for cardiovascular training

**Phase IV – Protective Activity Phase (25 – 35 weeks)****Goals:**

- Gradual return to running and sport specific agilities

**Weeks 25 – 30:**

- Continue balance/proprioception program
- Strengthening:
  - Continue previous closed chain and isolated quadricep strengthening
  - Begin light hamstring isotonics
  - Begin high-speed hamstring isokinetics
- Begin straight forward jogging program

**Weeks 31 – 35:**

- Continue strengthening, proprioception and running program
- Initiate agility program
- Initiate interval sport program

**Phase V – Return to Competition (9 months)**

**Criteria for return to play:**

- Physician approval
- Full, non-painful ROM
- Satisfactory clinical exam
- Satisfactory strength test (Quadriceps 90%)
- Successful completion of interval sport program