

## **Casp Patellaor Quad Repair Post-Operative Rehabilitation Protocol**

### **Phase I: 0 – 3 weeks**

- Hinged knee brace locked in extension at all times (may remove for hygiene purposes)
- Protected weight bearing with crutches/walker for first 2 weeks, then WBAT in brace
- Patella mobilization exercises
- Quadriceps isometric sets in full extension
- Prone ROM 0-30 wks 2-3
- Hip abduction straight leg raises
- Ankle ROM

### **Phase II: Weeks 3-6**

- Continue hinged brace locked in extension for ambulation, may remove/unlock for therapy
- Begin passive knee extension; active knee flexion to 30° @ week 2, to 60° @ week 4, then to 90° @ week 6 (prone position)
- Continue previous exercises
- Patella mobilization
- Isometric straight leg raises with brace locked in extension; supine/sitting
- Isometric hamstring strengthening

### **Phase III: Weeks 7 – 12**

- May start to unlock brace with ambulation; begin with flexion locked @ 45°, then advance 10°/week as quadriceps control increases
- Continue previous exercises
- Begin AAROM knee extension and advance to AROM knee extension
- Advance active knee flexion to 120°, and then advance as tolerated
- Stationary bicycle, start with no resistance and low knee flexion angle, and then may slowly advance
- At week 10, may begin treadmill walking program

### **Phase IV: Weeks 12 – 16**

- Ambulation with brace fully unlocked, then wean out of brace as tolerated
- Continue previous exercises
- Full active knee ROM
- Begin progressive resistive exercises, avoid open chain and terminal resisted knee extension
- Begin elliptical trainer
- May start light jogging
- Proprioception and balancing exercises

### **Phase V: Months 5 – 6**

- Maintain full knee range of motion
- Continue previous exercises
- Advance cycling, jogging
- Progressive strengthening, plyometric and agility training
- Add sport specific training

### **Phase VI: Months 6+**

- Resume normal sporting/jumping/cutting activities when leg strength >80% contralateral leg
- Maintain strength, agility and proprioception