

## Sports Injury and Joint Replacement Surgery for the Hip and Knee

# QUADRICEPS TENDON RECONSTRUCTION POST-OPERATIVE REHABILITATION PROTOCOL

### Phase I: Weeks 0 - 4

- Hinged knee brace locked in extension at all times
- Touch weight bearing with crutches
- Hip abduction
- Ankle ROM and gastroc-soleus strengthening with tubing/therabands

### Phase II: Weeks 4 - 6

- Continue hinged brace locked in extension
- May partial weight bear with brace locked in extension
- May remove for hygiene purposes leaving knee in extension
- Isometric straight leg raises with brace locked in extension
- Isometric hamstring strengthening

### Phase III: Weeks 6 - 12

- Continue hinged brace locked in extension for ambulation, may remove/unlock for therapy
- May fully weight bear with knee locked in extension
- Begin passive knee extension; active knee flexion to 30°, to 60° @ week 8, then to 90° @ week 10
- Continue previous exercises
- Patella mobilization
- Isometric straight leg raises with brace locked in extension
- Isometric hamstring strengthening

### Phase IV: Weeks 12 - 16

- May start to unlock brace with ambulation; begin with flexion locked @ 45°, then advance 10°/week as quadriceps control increases
- Continue previous exercises
- Begin AROM knee extension
- Advance active knee flexion to 120°
- Stationary bicycle, start with no resistance and low knee flexion angle, and then may slowly advance
- At week 14, may begin treadmill walking program

### Phase V: Weeks 16 - 20

- 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
- Proprioception and balancing exercises

### Phase VI: Months 5+

- Maintain full knee range of motion
- Continue previous exercises
- Progressive strengthening, plyometric and agility training



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APPOINTMENTS AND ENQUIRIES

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Ask **Dr Awwad** to clarify your restrictions prior to surgery to avoid disappointment.