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## DeNovo Knee Rehabilitation

### Phase I: Early postoperative Phase (0 – 6 weeks)

#### **Goals**

- Slowly improve passive knee range of motion

#### **Brace/Modalities**

- Brace locked in full extension for the first 2 weeks

#### **CPM**

- 6 hours / day; begin 0 – 40<sup>0</sup> and progress 5 – 10<sup>0</sup> per day as tolerated

#### **Weight Bearing**

- Non-weight bearing (careful toe touch acceptable)

#### **Exercises**

- **0-2 weeks:** Quad sets, SLR, calf pumps, passive leg hangs to 90°
- **3 – 6 weeks:** PROM/AAROM to tolerance, patella and tibiofibular joint mobs, quad, hamstring, and glute sets, SLR, side-lying hip and core exercises

### Phase II: Intermediate (weeks 6-8 weeks)

#### **Goals**

- Restore full ROM
- Regain full weight-bearing

#### **Weight Bearing**

- Full

#### **Exercises**

- Progress Phase I exercises

### Phase III: Progressive Phase (weeks 9–12)

#### **Goals**

- Enhance proprioception/balance
- Improve muscular endurance
- Add core strengthening

#### **Exercises**

- Begin closed chain activities: wall sits, shuttle, mini-squats, toe raises, begin unilateral stance activities, balance training, ankle pumps, straight leg raises, hip strengthening
- Stationary bike with gradual increase in resistance

#### **Phase IV: Functional Phase (weeks 13–24)**

##### **Goals**

- Normalize strength
- Enhance power and endurance
- Improve neuromuscular control

##### **Exercises**

- Gentle, progressive resistive exercises as tolerated for knee, hip, and ankle
- Elliptical / bike as tolerated

#### **Phase V: Return to participation (6 – 12 months)**

##### **Criteria:**

- Minimal pain
- No swelling
- Full range of motion
- Quad / hamstring strength greater than or equal to 85% of normal side
- Clearance by Dr. Angelo