GALLAND/KIRBY TOTAL KNEE AND UNI-COMPARTMENT ARTHROPLASTY POST-SURGICAL REHABILITATION PROTOCOL

POST-OP DAYS 1 – 7

- TED Hose x 6 weeks
- Walker or crutches:
  - **Primary** – Weight bearing as tolerated (WBAT)
  - **Revision** – 50% Weight bearing x 6 weeks
- Bed mobility and transfers
- Heel slides, AROM, AAROM, PROM as tolerated
- Straight leg raise (SLR) x 4 in standing
- Short arc quads
- Calf pumping
- Quad sets, Co-contractions quads/hams
- Passive extension with heel on bolster or prone hangs
- Ice and elevation – Pillow under ankle **NOT** knee

**GOALS**

- Independent with bed mobility and transfers
- Independent ambulation 100 feet
- AROM 5 - 90

**Weeks 1 - 3**

- Walker or crutches:
  - **Primary** – WBAT, progress to cane and D/C when gait is normal
  - **Revision** – 50% Weight bearing until 6 weeks post-op
- Continue TED Hose and appropriate previous exercises
- AROM, AAROM, PROM through full range as tolerated
- Stationary bike for ROM
- Patellar mobilization (teach patient)
- Scar massage when incision healed (teach patient)
- Electrical stimulation in full extension with quad sets and SLR
- SLR x 4 on mat
• Weight shifts and Mini-squats in parallel bars (0-45 degrees)
• Stretches – Hamstring, Hip Flexors, ITB
• **Primary Only:**
  – Wall squats (0-45 degrees)
  – Forward, retro and lateral walking in parallel bars
  – Double leg heel raises

**GOALS**
• ROM 0-110 degrees
• No extensor lag

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**WEEKS 3 - 6**

• **Primary** – Cane as needed, D/C when gait is normal
• **Revision** – Walker or crutches, 50% Weight bearing
• Continue TED Hose and appropriate previous exercises
• SLR x 4 on mat, add ankle weights as tolerated
• Leg press (double leg) up to ½ body weight
• Hamstring curl weight machine (double leg) with light weight as tolerated
• Sitting knee extension (chair or mat) 90-0 degrees
• Stationary bike for progressive resistance and time
• **Primary Only:**
  – Forward, retro and lateral step downs (small to med step)
  – Single leg heel raises

**GOALS**
• ROM 0-120 degrees
• Primary – Normal gait

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**WEEKS 6 - 9**

• D/C TED Hose
• **Revision:**
  – Walker or crutches, Weight bearing as tolerated (WBAT)
  – Progress to cane as tolerated, D/C when gait is normal
• Continue appropriate previous exercises
• **Revision** – Begin:
  – Wall squats (0-45 degrees)
  – Forward, retro and lateral walking in parallel bars
  – Forward, retro and lateral step downs (small to med step)
– Double leg heel raises

- **Primary and Revision:**
  - Standing SLR x 4 with Theraband bilaterally
  - Isometric knee extension at 0 and 60 degrees
  - Proprioception exercises – Single leg (stork) standing in parallel bars
  - Treadmill – Walking progression program
  - Elliptical trainer

**GOALS**
- ROM WNL and equal bilaterally
- Revision – Normal gait

**WEEKS 9 – 12**
- Continue appropriate previous exercises
- Leg press – Single leg
- Hamstring curl weight machine – Single leg
- Leg extension weight machine – Double leg, progress to single leg as tolerated
- Hip weight machine x 4 bilaterally
- Single leg heel raises
- Practice sit-to-stand without using hands
- Stair training
- Proprioception exercises – Double to single leg BAPS
- Cone drills – Side step, cariocas, elevated walking
- Pool therapy
- Quad stretches

**GOALS**
- Walk x 20 minutes
- Independent with stairs

**MONTHS 3 – 4**
- Discontinue supervised PT
- Resume all recreational activities as tolerated
- Encourage non-impact activities
## SPORT ACTIVITIES

<table>
<thead>
<tr>
<th>SPORTS NOT CONTRAINDICATED</th>
<th>POSTOPERATIVE INITIATION</th>
<th>RETURN TO PREVIOUS LEVEL OF ACTIVITY</th>
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</thead>
<tbody>
<tr>
<td>Swimming</td>
<td>Pool aquatic activity at 6 weeks if wound healed</td>
<td>1 year</td>
</tr>
<tr>
<td>Bowling</td>
<td>3 months</td>
<td>6 months</td>
</tr>
<tr>
<td>Golfing</td>
<td>Chipping and putting – 3 months Driving – 6 months</td>
<td>Ok to start at 6 months Full activity at 1 year</td>
</tr>
<tr>
<td>Tennis Doubles</td>
<td>6 months</td>
<td>1 year</td>
</tr>
<tr>
<td>Snow Skiing</td>
<td>Greens/Blues 6 months</td>
<td>1 year</td>
</tr>
<tr>
<td>Horseback Riding</td>
<td>3-6 months if experienced</td>
<td>1 year</td>
</tr>
<tr>
<td>Bicycling</td>
<td>Stationary (at home) – 2 months Outdoor – 3 months</td>
<td>1 year</td>
</tr>
</tbody>
</table>

## SPORTS / ACTIVITIES NOT RECOMMENDED

- Jogging / Running / Jumping
- Basketball / Football / Baseball / Soccer / Volleyball
- Waterskiing
KNEE POST-OP PHASE I

Perform exercises below frequently: 30 reps, 3 – 5x a day

Quad Isometrics

Heel Slides

Active Assisted Motion

Ice Position  15 minutes 2-3 x per day