

ORTHOARIZONA

Shelden L. Martin, M.D.

Total Knee Arthroplasty Protocol

Recommendations:

Consult with MD regarding method of fixation (cemented vs. noncemented) and any specific precautions for each patient. Patients with cemented prosthesis may be weight bearing as tolerated. Prepare the patient mentally for ROM (flexion & extension), with emphasis on frequency throughout the day. Instruct patient to perform motion exercises 3-5 times per day. No driving for 4-6 weeks status post.

5 days-3 weeks

- Emphasize full extension 0 /-5 degrees.
- Flexion should be 100/110 degrees by 3 weeks
- Progress to ambulating with cane as patient achieves quadriceps control
 - Aggressive ROM stretching for flexion and extension
 - **Flexion:** PROM, chair scoots, stationary bike, prolonged static stretching (8-12" box stretch, prone quadriceps stretch with belt)
 - **Extension:** PROM, heel propping or prone hang 10 –15', also performing Ultrasound and soft tissue massage to posterior knee will help to increase extension. Hamstring and gastroc stretching.
 - Electrical Stimulation / Biofeedback to stimulate quad control.
 - Patella mobilization and scar massage after staples are removed, emphasizing inferior glides.
 - Quad sets, TKE's, 4-way straight leg raises, hamstring curls, mini-squats, calf raises.
 - Leg press (range of motion to tolerance), calf exercises on leg press, hamstring machine, multi-hip for resistance.
 - Gait training to cane as quad control allows.
 - Ice 3-4 times a day.

3-4 weeks

- Continue aggressive range of motion with goal of 0/-5 degrees of extension and 110-120 degrees of flexion or greater.
- Progress to independent ambulation with assistive devices.
- Continue PROM for flexion / extension.
- Continue patella mobilization and scar tissue massage.
- Progress to functional activities; front and lateral step-ups, lunges, balance activities.

- Advanced gait activities: side stepping, retro walking, cone walking, stairs.
- Elevation and ice for edema
- Discuss return to long term activity and recreational interests with appropriate modifications.
- Education and training for kneeling (patients have a lower perceived ability than actual ability due to fear of damaging prosthesis and scar pain.)