TOTAL KNEE REPLACEMENT (TKR)
POST-OPERATIVE REHABILITATION PROTOCOL

PRE-OPERATIVE

The Patient will be scheduled for total joint replacement classes held by the Winchester Medical Center. They will guide you through the process involved in joint replacement and what to expect afterward.

You will also have to undergo medical clearance to be sure that you are healthy enough for surgery.

The Wellness Center provides a “Fit For Surgery” Program that can help you to gain strength and lose weight before your surgery. Ask your surgeon about this if you are interested.

You will have to undergo some blood work and cultures as part of the work up before surgery to maximize your outcomes and decrease your risk of infection.

PHASE I: EARLY FUNCTION (WEEK 1)

Goals:

1. demonstrate safe and independent transfers from bed and chairs.
2. demonstrate safe and independent ambulation to 100 ft. with walker.
3. negotiate steps safely.
4. demonstrate balance with appropriate assistive device.
5. attain full extension (0°) and 100° flexion of the involved knee.
6. demonstrate home exercise program (HEP) accurately.

Day of Surgery

- Depending on your surgeon, a continuous passive motion machine may be used immediately after surgery.
- Ice for 30 minutes every 1-2 hours. Depending on time of surgery, a physical therapist may help you out of bed in the afternoon of surgery.
- A pillow should be placed under the ankle when the CPM is not in use to allow gravity to help gain extension.

Copyright 2011 Bone and Joint Specialists of Winchester, P.C.
Postop Time in Hospital

- Focus on Full Extension as Priority # 1. Increase CPM approximately 10° per day, if it is being used.
- Ice involved knee for 20-30 minutes for minimum of 3 times per day (more if necessary).
- Review and perform all bedside exercises which include ankle pumps, quadriceps sets, gluteal sets, and heel slides.
- Sit at the edge of bed or in chair for all meals.
- Goal to ambulate with standard walker 100’ with moderate assistance.
- Sit in a chair as much as able minutes.
- Actively move knee with goal of 90° of flexion.
- Discharge from the hospital to home if ambulating and negotiating stairs independently.

PHASE II: PROGRESSIVE FUNCTION (WEEKS 1-6)

Goals:

1. Progress from walker to straight cane as tolerated. There is no set time limit on walker use.
2. Improve involved lower extremity strength and proprioception.
3. Improve static and dynamic balance to good-normal.
4. Maximize function in the home environment.
5. Attain 0-125° active knee motion.

Weeks 1 - 3

- Monitor incision site and swelling.
- Progress ambulation distance.
- Begin stationary bicycle with supervision for 5-10 minutes.
- Begin standing wall slides. DO NOT ALLOW THE KNEES TO MOVE FORWARD OF THE TOES.
• Incorporate static and dynamic balance exercises.
• AROM 0-115°.

WEEKS 3-6

• Continue as above.
• Increase stationary bicycle endurance to 10-12 minutes, twice per day.
• Attempt unilateral stance on the involved leg and side stepping.
• Incorporate gentle semi-squats (BODY WEIGHT ONLY) concentrating on eccentric control of the quadriceps.
• Attain AROM 0-120°.

PHASE III: ADVANCED FUNCTION (WEEKS 6-8)

Goals:
1. Progress to ambulating without an assistive device.
2. Improve static and dynamic balance to normal without assistive device.
3. Attain full AROM (0-135°).
4. Master functional tasks within the home environment.

WEEKS 6-8

• Ambulate with straight cane only and wean from it as tolerated.
• Increase stationary bicycle to 15 minutes, twice per day.
• Ambulate indoors WITHOUT device.
• Focus exercises on strength and eccentric control of muscles.
• Focus on unilateral balance activities.
• Continue aggressive AROM exercise to promote knee range of motion 0-135°