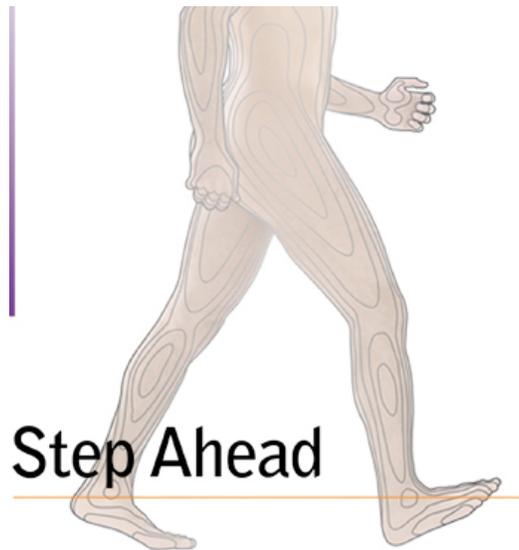


KNEE ARTICULAR CARTILAGE REPAIR

Patient Information & Exercise Folder

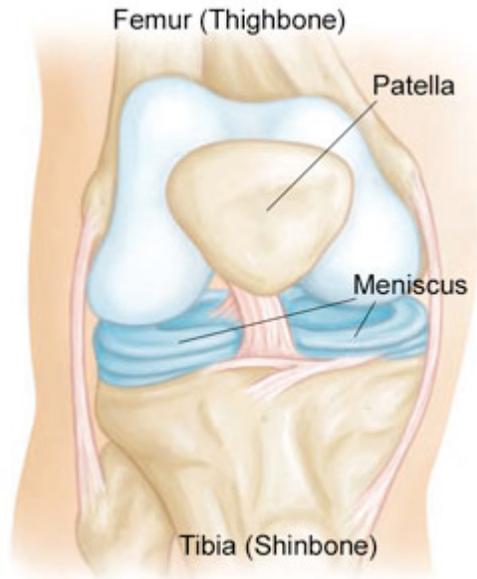
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Your knee is the largest joint in your body and one of the most complex. Because it is made up of so many parts, many different things can go wrong.

Anatomy



Normal knee anatomy

Three bones meet to form your knee joint: your thighbone (femur), shinbone (tibia), and kneecap (patella).

Two wedge-shaped pieces of cartilage act as "shock absorbers" between your thighbone and shinbone. These are called meniscus. They are tough and rubbery to help cushion the joint and keep it stable. The lining of these bone are covered by smooth glistening surface (articular cartilage)

Articular Cartilage Repair Rehabilitation Protocol

Programme varies depending upon the site and repair procedure.

You might be given a brace to use

ROM

0 – 30 deg for 2 weeks

0 - 60 deg for 2-4 weeks

0- 90 deg for 4-6 weeks

Non- weight bearing for 8 weeks (usually)

Pre-Op Instructions

1. Gait training instruction with crutches.
2. Instruction in immediate post-op exercises.

Post-Op: Day of surgery at home.

1. Ice & elevation of knee. Compression wrap should be worn to control swelling.
2. Do not allow incisions to get wet while bathing.
3. Range of motion exercises:
 - a. Ankle range of motion (ABC's), and
 - b. Heel Slides (**Do Not Flex Past 90° for 4 weeks**)

You might be advised to do

4. Begin strengthening exercises as tolerated:
 - a. Quadriceps and hamstring sets,
 - b. Straight Leg Raises (SLR): supine, Abduction, Adduction, Prone, and
 - c. Seated knee extension, hip flexion, standing knee flexion, and Terminal Knee Extensions.
5. Ice before and after exercise and 20 minutes every 2 hours while awake.
6. **Non-weight bearing with crutches for 8 weeks.**

Post-Op: Day 1

1. Continue ice, elevation, and compression wrap.
2. Continue range of motion exercises 2 - 3 times per day and add:
 - a. Stationary bike riding with seat height as low as tolerable with low resistance.
4. Continue strengthening exercises.
5. Ice before and after exercises and 20 minutes every two hours while awake.

Post-Op: Day 2 - 7

1. Continue ice and elevation.
 2. Continue range of motion exercises.
 3. Continue strengthening exercises by utilizing PRE principle and add:
 - a. Weight to all SLR's, Knee Extension, Knee Flexion, Hip Flexion, and TKE's.
 5. Ice before and after exercise and continue use of compression wrap.
6. Physician examination 6 - 8 days post-op for evaluation and suture removal.

Post-Op: Week 1 - 3

1. Continue ice and elevation as needed.
2. May shower or bathe after sutures have been removed.
3. Continue range of motion exercises to 90° of flexion limitation.
4. Continue strengthening exercises.
5. Ice before, if indicated, and after exercise.

Post-Op: Week 4 - 8

1. May apply lotion to incisions sites using heel of thumb and pressure as tolerated.
2. Continue range of motion exercises progressing past 90° to achieve full motion.
3. Continue strengthening exercises, and add:
 - a. Heel raises with balance assistance,
 1. Progressing to elevated or one-leg heel raises.
 - b. Partial squats with balance assistance,
 1. Progressing depth as tolerated, and
 2. Progressing to single leg squats.
 - c. Side Step-Ups,
 - d. Stair Climber exercises, and
 - d. Begin Walk-Jog program on smooth, flat surface, walking curves as tolerated at 6 weeks.
4. Return to full activities when:
 - a. Range of motion and girth measurements are bilaterally equal,
 - b. Bilateral strength measurements are 85% or better, and
 - c. Clearance by treating physician.

The protocol is for guidance only.

Patients heal at different rates, possess various pre-operative deficiencies, and require specific attributes to perform normal function. Due to these factors, this protocol must be individualized to each patient to allow for optimal return to desired activities.