

Implement A Post-Operative Plan That Drastically Improves Your Knee Surgery Results

SURGERY PREPARATION

Ensure an LRU Pillow and RIET Protocol Guide are placed in the patient's aftercare room.

SURGICAL PROCEDURE

Conduct your surgical procedure.

IMMEDIATE POST-OPERATIVE CARE

Rest

Optimize the time spent in LRU, ideally only removing for bathroom breaks and exercises. Try to limit walking to 5-10 minutes at one time.

Ice

Apply ice with compression.

Elevate

Place the LRU pillow under the patient's leg as soon as possible after completion of surgery, ideally in OR, keeping their knee about their heart.

Therapy

Exercises should begin in the recovery room (PACU) and performed four times a day.

[Click here for the exercises.](#)

BEFORE D/C

1. Review exercises with the patient. [Click here for the exercises.](#)

2. Send patients home with a pillow to seamlessly follow the RIET Protocol for the next 10-14 days.

The first 10-14 days are designed to prevent swelling. The most important part of the initial healing is minimizing swelling because swelling/effusion causes shut down of quads, stiffness in motion, and increased pain. Swelling/effusion is nearly impossible to reverse, try to prevent it.

3. Send patients home with LRU Instructions [linked here](#).
4. More aggressive PT with a therapist should begin on days 10 to 14.

Notes for the first 10-14 days:

- Patients should be limited to bathroom breaks only.
- If they need to take a break from the LRU pillow, try to do so by lying flat.
- Soreness tends to peak on days 2-5 and begins to lessen from there.
- Walking is initially performed with a front-wheeled walker.

GOALS

The goal of knee replacement is to reduce/eliminate pain and improve function. This includes good quad control, normal gait, reciprocal ascending and descending of stairs, and returning to activities they love - lifting grandchildren, golfing...

First 2 Weeks: Prevent Swelling

Immediately following surgery, patients limit swelling by proper rest, ice/compression, elevation, and therapy (RIET).

- Optimal elevation and extension are accomplished with the LRU making the return of terminal extension much more effective. By limiting swelling the flexion and quad control will return much quicker
- Therapy focuses on bending, straightening, and thigh/quad strengthening up to 4x a day.

At 2 Weeks:

The knee should be almost entirely straight and bending to 115 degrees.

By 2 months: Full terminal extension

The knee is straight, bending to at least 120 degrees, and walking normally.

WHERE SOME PROGRAMS FALL SHORT

1. Patients up and walking



Although this works for THA, it fails in the knee. Walking causes the knee to be in a dependent position encouraging swelling. Swelling causes more pain, slower return of quad function, and stiffness with motion. The initial gait patients use is poor and the habits they develop during this time will need to be reversed.

2. Patients encouraged to bike

Cycling fails in the knee because it encourages swelling during the acute phase. After the first 10-14 days, it's fine but prior to that often leads to a stiff, swollen knee. Swelling causes more pain, slower return of quad function and stiffness with motion.

3. Patients sitting in a chair

Sitting immediately following surgery encourages swelling which causes more pain, slower return of quad function, and stiffness with motion. Patients should be in a lying position with their leg elevated for a large majority of the first 10-14 days.

4. Utilizing a CPM

The CPM keeps the knee elevated but allows the leg to externally rotate making terminal extension difficult. The CPM is also heavy and hard for caretakers to move. Controlling the swelling is the key, when the swelling is controlled the flexion returns much more easily, and the LRU pillow provides optimal swelling prevention. Patients are typically more compliant using the LRU Pillow over a CPM machine.

“Thank you! I had my first total knee done about 9 years ago and I like it now, but it was a difficult time after surgery. My other knee surgery was done a couple of months ago and the only thing that changed was that my surgeon was now using the LRU Pillow. Not only was the pain afterward much less, but my function returned much much quicker. I was walking normally by 1 month and can easily go up and down stairs. It took many months for me to be able to do that after my first knee”

- Sue H. | Knee Surgery Patient

