### TOTAL KNEE REPLACEMENT INSTRUCTIONS



# FREEDOM From Pain, MOVEMENTS For Life

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### **Instructions following Total Knee Replacement**

Total Knee Replacement is a well-accepted procedure with very successful outcome. It is offered to people suffering from advanced osteoarthritis of knee joint, and post-surgery brings significant improvement in the quality of life. You may want to know how to take care after total knee replacement surgery for good outcome.

### When will I start walking?

After total knee replacement, ambulation is started next day after surgery under the guidance of physiotherapist. Walker frame is used for initial support with full weight on the operated legs. In some difficult revision knee replacement an alternative schedule may be followed.

Some patients may feel numbness or weakness in their legs; or may feel vertigo / some drowsiness, immediately after standing for the first time after surgery. This can be due to use of epidural blocks and other medicines to control pain, sometimes medical conditions can also be the cause. Just do not worry, you will be helped to sit up in bed, have plenty of fluids, start doing exercise in bed and bed side sitting. Most of the time, after few hours or may be next day, you will be walking with walker support comfortably.

From next day onwards, your ambulation distance and frequency will increase gradually, and once comfortable with that, your toilet training will be started. If while walking, you are unable to straighten your knee, or you feel the need of knee support, a knee brace may be added.

Progress from walker frame to stick or even without it, varies from person to person. It depends not only how soon you feel better & comfortable, but also how balanced you are while walking.

At the time of discharge, most of our patients walk independently without support and go to toilet on their own. However, walker is advised a little longer especially for sitting up or down on toilet seat till you are fully independent. In elderly patients it's used as long as they feel safe to walk without it.

At Home: Initially you will be asked to walk inside the house, but can start walking outside the house or in open

space as soon as you feel more comfortable. This can happen even before suture removal. People within the house tend to walk less and especially with a short stride (unlike people walking outside in an open space), thus takes longer to regain normal gait pattern. But choose your walking spaces carefully and preferably it should be even, properly cemented /or hard surface and open with minimal traffic.

### **Exercise and Activity**

Exercise is the key to successful outcome of total knee replacement surgery. Knee bending exercises are started from next day of surgery. You will be requested to focus on in-bed exercises especially knee bending (in bed and bed side) and quadriceps or knee straightening strengthening exercises (in bed and bed side). CPM machine or quadriceps stimulation may be added depending on need. Knee brace may be added if your knees are bent or there is need of support while walking.

Exercises are not difficult but should be carefully learnt so that you strengthen right group of muscles. Exercises should not cause pain, but if a particular one does causes pain, eliminate that particular exercise from your exercise schedule till you are in touch with your physiotherapist or surgeon. (See Guide to Exercise).

My best advice to you during the recovery period is to listen to your body as well. That is, if you feel pain during the exercises or afterwards you have probably overdone it. The exercises for the knee joints should be done regularly and correctly as advised and most importantly **throughout your** *life.* 

I also recommend that you ride a stationary bicycle / exercise paddle as soon as you are comfortable to ride. We start paddling to most patients in the hospital.

### **Climbing Stairs**

The following instructions are useful for climbing and descending stairs. Most patients do stair climbing before discharge.

In case of unilateral total knee replacement: unoperated leg first; If you have bilateral knee done then stronger leg

goes first."

Going up stairs Hold the rail in one hand and your stick in the other. Go upstairs with: Un- operated / Good leg first - then operated leg - then stick. Repeat this on every step.

Going down stairs Hold the rail in one hand and your stick in the other. Go downstairs with: FIRST with Stick - then operated leg - then un- operated leg. Repeat this for every step.

#### **Dressing and Incision care**

Surgical wound is inspected 3rd day after surgery or on the day of discharge and an occlusive sealed dressing is applied. Thereafter, it is removed on the day of suture removal ie., 14 days after surgery. In between no dressing is required. Surgical Dressings should stay dry. There may be occasional blood spots which should not change in size, but if the spot is increasing in size regularly, or dressing gets soaked / wet / soiled, please contact your doctor immediately. Also inform in case dressing is getting loose or peeling off.

We particularly need to stay careful with very elderly patients, or people with poor bladder control as the chances of contamination of dressing with urine or stool is a possibility, which means high risk of infection, but It happens only if due care not taken.

At home you may also feel some discomfort, heaviness, mild pain or itching in or around the wound, but there is nothing to worry for these symptoms as long they are mild and tolerable.

You may also see patches of ecchymosis / blue spots around the dressing or thigh / calf, but these are not a cause of worry. These ecchymosis patches appear within the first week post-surgery and may take up to 3 weeks to disappear completely. Patients on prolonged blood thinners may have a large ecchymosis patch.

**Bathing** is usually not allowed until the stitches come out in 2 weeks; sponging is advised till that time. Dressing should also not get wet till sutures are removed. If the dressing appears soaked from underneath then please inform your surgeon immediately. The dressing applied in the hospital on the day of discharge can be left on until removed by your surgeon at 2 weeks (day of suture removal).

### **Pain Medicine**

Pain medication is needed for regularly needed for initial 3 to 4 weeks after total knee replacement. Although some of you may need pain medication for a longer time, but for most, requirement remains largely on SOS basis. When more than one medicine is prescribed for pain, then do not take them together, but divide them evenly over the day. Ice pack should be used often after surgery. A skin patch (Buvelor &/or Ketopatch) for pain is also used in hospital and at home after discharge as it provides an effective additional relief along with oral pain medicines.

Some patients are comfortable during the day, but unhappy during night so much so, they are unable to sleep. They need the help of sleep medicine to correct sleep cycle or else to induce sleep. They feel lot better when they regain their activity level before.

However, if pain is intolerable despite all these medicines, use ice packs besides calling your doctor. It is very important to remember that you MUST avoid alcohol and banned drugs while taking pain medicine.

**Blood Thinners** are prescribed after total knee replacement for 3 weeks, to prevent any untoward incidence of blood clots and pulmonary embolism after the surgery. Medicines usually preferred in hospital are Injectable (like clexane), however, at home oral medicines are used like Ecospirin or Riveroxiban. If you are on regular blood thinners prior to surgery, then you need to continue as before in consultation with your physician. In hospital mechanical pumps (DVT pump) are also used in addition to medicines.

Antibiotics protocol varies from surgeon to surgeon. We routinely prescribe for 3 days post-surgery, but in revision knee replacement surgery, immunecompromised, diabetic, rheumatoid, psoriasis etc, antibiotics are prescribed for a longer duration. In post *infective revision total knee replacement, the antibiotic duration may be extended up to 3 months.* 

### Diet

You need to eat to gain back your strength. You should resume your pre-hospitalization diet unless otherwise instructed and have enough/extra protein, calcium and vitamins in your diet. Elderly persons can supplement with protein powders if their diet very poor. Medicines, juices & fruits will neither give you calories nor strength to your muscles.

## When can I go outside my home for walking or for outpatient therapy?

Initially it's a better idea to walk inside the house, but can start walking outside the house or in open space as soon as you feel more comfortable. Also, it is better to have physiotherapist to come to your home for exercises for the first 2 weeks after discharge. After initial two weeks, as pain reduces and muscles gain strength (My recommendation) it is better to visit a physical therapist at his / her clinic for knee exercises. Going everyday to the physical therapist clinic is also an exercise (walking, climbing etc,) besides doing exercises there with variety of equipment, and for longer duration at comfort level of yours. On the contrary at home you are exercising only for the duration therapist is at home without the equipment, and for a fixed time of 45-60 minutes. Walking outside *your home / stairs climbing can be started as soon you* are comfortable after discharge. As mentioned, walking outside home will get you regain normalcy much earlier

### When can I drive?

You should not drive as long as you are taking narcotic pain medications. It largely depends on your recovery; however, 3 to 6 weeks is a good time to drive for most if not for all.

### How do I go back home? Getting in and out of a car:

Most patients travel back home after total knee replacement in their car. Always choose the front passenger seat. Make sure that the seat is pushed well back and reclined slightly so that you will not be sitting absolutely upright. (if your car seat is very low then put pillows on the seat).

Stand with your back to the seat as you feel it at the back of your legs / knees. Place your left hand on the back of the seat and your right hand on the dashboard / base of the seat, and with the help of your hands and both legs leg push yourself backward gently onto the seat. Once seated gently swing your legs into the car.

To get out, reverse the procedure and make sure the operated leg is out in front before rising from the seat.

### I am experiencing a lot of swelling, is it normal?

You may notice swelling in leg after surgery. Usually it is less a problem in the hospital because you are ambulating less and 24x7 mechanical pump (DVT pump) is used over the calf to reduce swelling. If you notice it at home, you can do the following at home-

- At night / rest place pillows underneath the legs (not under knee) so that they are above the heart.
- Avoid sitting for more than 30 to 45 minutes at a time
- Elevate the operated leg & foot intermittently
- Perform ankle and foot pump exercises whole day
- Use ice pack 3 times a day
- If increasing: use above knee elastic compression socks, also DVT calf pumps can be hired for home
- Adequate care of medical conditions like hypertension, renal failure, cardiac failure, low proteins, low haemoglobin will help recover swelling

### When you must call your surgeon!

If you experience any of the following problems

- If dressing feel wet
- Redness around stitches
- Fever / Temperature over 101 degrees

- Sudden shortness of breath or chest pain or difficulty in breathing
- Increasing tenderness of thigh or calf or increasing pain
- Swelling of the knee, calf, or ankle that does not respond to elevation of leg or methods. The leg and ankle must be elevated above the level of the heart

### Do's and Don'ts after Your Total Knee Replacement

Below is a general list of precautions to follow after your total knee replacement.

*Never Do* Squatting (Indian toilet Position), High Impact Sports/Aerobic exercises, Jumping

Avoid Doing Vigorous Sports, Skiing, Running, Weight Lifting etc.

*Can Do* Walk, Cycle, Drive, Sit cross leg, Yoga (simple), Recreational games like Golf.

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### ARTHRITIS & JOINT Replacement Clinic

15, Jain Mandir Road, New Delhi-110001 Near hotel "*The Connaught*" / Shivaji hockey Stadium Timings: Mon to Fri - 6.00 pm to 8.00 pm