

Warren Matthee

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ORTHOPAEDIC SURGEON

Pr. No: 0444340

Physiotherapy Protocol – Total Knee Replacement (TKR)

***** Postoperative physiotherapy will not be included in the hospital fee *****

This will be required to be submitted to your medical aid or paid separately

Recommendations following your surgery:
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- **Bathroom:** A toilet seat raiser may be useful in getting on and off the toilet.
- **Bruising:** This may sometimes appear only after you have gone home and can sometimes extend down the leg. This is normal and there is no need for concern.
- **Discharge:** You will usually be in hospital for three to five days, depending on the progress you make and what type of knee replacement you had. You should expect to mobilise on the day of the surgery. The physiotherapist will assess you daily and proceed with short distance mobilisation with a walking frame and bed exercises. You will be discharged when you are medically stable and the physiotherapist is satisfied that you are mobilising safely.
- **Dressings:** You may remove the wool and bandages around your knee 48 hours after the surgery but do not remove the dressings (plasters).
- **Driving:** No driving before your 6-week post-operative appointment. When getting into the front passenger seat of a car, ensure the chair is pushed back as far as it will go so that you don't have to bend the knee too much as you lift your leg in. If sitting in the back seat, enter the car on the side of your operated leg and slide onto the seat so that your operated leg is fully extended and against the back of the seat. This will keep your knee in a protected position should the car suddenly stop.

Indications that you can drive are: Minimal pain (you should not be on any painkillers); Able to get in and out of car on your own without assistance; Only using one crutch

- **Follow-up:** Please ensure you have an appointment to see Dr Matthee 14 days after the surgery for a wound check. Please discuss arrangements for further post-operative physiotherapy with Dr Matthee at this time.
- **Housework:** For the first 3 months, you should be able to manage light chores, such as dusting and washing up. Avoid heavy household tasks such as vacuuming and changing the beds. Do not stand for long periods as this may cause ankle swelling and avoid stretching up or bending down for the first six weeks.

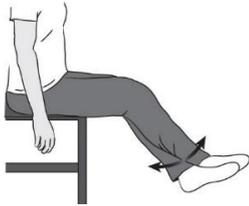
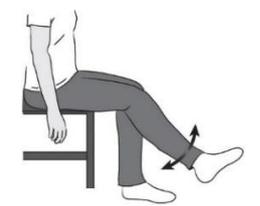
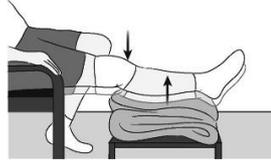
- **Ice packs:** Ice is an effective analgesic. It can be used over the knee to help with pain and local inflammation. Can be used 3 – 5 x per day, in a thin towel for 15 minutes at a time. Do not apply for long periods or directly to the skin.
- **Medication:** Take **pain medication** as prescribed. This will minimize protective muscle spasm and allow for a speedy return to activities of daily living and facilitate rehabilitation. You may have to take **blood thinning medication** on discharge. This is very important to reduce the risk of blood clots after your surgery.
- **Rest and elevation:** Rest as much as possible for the first 3 days. Activity will cause the knee to swell, which can cause discomfort, stiffness and delay recovery. In the first two weeks you should not let your leg hang down for more than 20 minutes. Make sure the leg is elevated and straight at rest to avoid swelling by placing a pillow under the knee and lower leg. **DO NOT** place a pillow under knee alone, as this causes it to remain in a flexed (bent) position.
- **Sitting:** In the first two weeks after the operation, sit with you operated knee slightly extended. There should be no stretching or tension on the wound.
- **Sleeping:** You may sleep on your back or on your sides. Put a pillow between your knees when lying on your side. **NO** pillows under operated leg if lying on your back.
- **Stitches:** Usually “dissolving” stitches are used, so there will be no need to remove stitches once the wound has healed.
- **Swelling:** Your knee may be swollen for up to four months after the operation. If your calf becomes swollen or painful or your knee becomes hot or red, despite having elevated your leg overnight, contact Dr Matthee’s rooms as soon as possible. If you become short of breath please go immediately to the casualty department.
- **TED stockings:** Above-knee TED (Thrombo-embolic Deterrent) stockings are worn to lower the risk of developing a blood clot, and as a compression garment for swelling. They are to be worn on both legs for 2 weeks and then only on the operated leg for a further 4 weeks. They should be removed when washing.
- **Washing: Showering ONLY, no bathing.** Although they are waterproof, **the dressings / plasters should not be soaked.** Keep the operated area dry when washing. It can be useful to wrap cling film over the dressings during showering. If you feel unsteady, then using a chair in the shower is useful (e.g. a plastic garden chair).
- **Work (if applicable):** This depends on the type of work that you do, but is usually between 6 to 12 weeks. If possible, try to arrange to start on light duties.

Home Exercise Program: Perform 2-3 X per day

***** Precautions *****

DO NOT force a stretch

Do your exercises in a pain-free range of movement

Foot Pumps	Calf Stretch	Straight Leg Raise	Quadriceps Setting
Move your feet up and down at the ankles	Use a towel to stretch calf. Push knee down and lift heel, hold for 30 seconds	Keeping your knee straight, tense your thigh muscles, lift your foot off the floor/bed, hold for 5 - 10 seconds and relax	Place small towel under heel and tighten the thigh muscles, aim for straight knee, hold for 5 – 10 seconds and relax
20 repetitions	3 repetitions	10 minutes	20 repetitions
			
Knee to Chest (30°)	Assisted Knee Bend	Unassisted Knee Bend	Passive Knee Extension
Slide your foot toward your buttocks, bending your knee and keeping your heel on the bed	While sitting, put the heel of your good foot on the operated foot and bend the knee, hold 5 – 10 seconds	While sitting, bend the knee as far as you can. When the foot is on the floor, lean forwards, hold for 5 – 10 seconds	Rest your heel on a pillow or on a chair and allow your knee to gently straighten into extension
5 repetitions	10 Repetitions	10 Repetitions	10 minutes
			

Walking with Crutches

The main goal in the first two weeks after surgery is to get you mobile and be able to **achieve and maintain full knee extension**. Crutches should be used for 4-6 weeks after the operation to unload the knee and allow the bone to grow onto the prosthesis. Thereafter, use 1 crutch on the un-operated side for a further 1-2 weeks. A physiotherapist or orthotist will measure and provide you with a pair of crutches and show you how to use them.

Standing and Sitting	When standing up and sitting down, make sure you take your arms out of the crutches and hold them in one hand. This will help to avoid any shoulder injuries. In the first two weeks after the operation, sit with you operated knee slightly extended. There should be no tension on the wound.
Walking	When walking with the crutches, keep the handles pointing forwards and your arms close to your sides. Place both crutches forwards together with enough space in between them to step into. Take advice from your therapist as to how often you should be walking. It is not advisable to walk too much in the first 2 weeks post op as this can increase swelling and discomfort. You should be mobile within your home.
Weight Bearing	If you are advised that you are allowed to weight bear, place the crutches forwards together and then step your injured leg up to the crutches. Now lean through your arms as you step your uninjured leg forwards to the same level. Partial Weight Bearing: You may put about 50% of your weight on the operated leg Full Weight Bearing: You may put your full body weight on the operated leg
Stairs	When climbing stairs, try to use a banister or rail in one hand and a crutch in the other (you can also carry the extra crutch in this hand): GOING UP: Good leg, bad leg, crutch, GOING DOWN: Crutch, bad leg, good leg. Up with the good; down with the bad