

BSc (Med) MBBS FRACS (Orth)

#### Specialist Orthopaedic Knee Surgeon

Phone: 02 9680 1315 Fax: 02 9634 4916 enquiries@drbalalla.com.au www.drbalalla.com.au

Orthopaedic Associates Castle Hill Day Surgery Suite 1, 72–74 Cecil Avenue Castle Hill NSW 2154

Sydney Orthopaedic Trauma & Reconstructive Surgeons Suite 5, Level 2, 19 Kensington Street Kogarah NSW 2217

## Post-operative information

## Total knee replacement

## Day of operation

You will arrive on the ward following your surgery. You may have had a spinal anaesthetic which will wear off after a couple of hours. There may be some pins and needles in your feet as it wears off. There will be a button to press if you experience pain, but due to the local anaesthetic injections during the operation, this is likely to be minimal.

I would like you to try to walk outside of your own hospital room on the first day. This helps you to get used to your new knee, and reduces the chances of a DVT. Feel free to put your full weight on your operated knee, and bend the knee as much as you wish.

You will have an icepack which will be applied over your dressings. There will be a device to compress your calves intermittently to help reduce the risk of DVT. You can help this by wriggling your toes and moving your ankles up and down frequently.

#### **Nursing instructions:**

- > Pain relief via oral analgesia or PCA
- Calf compressors while in bed
- Cryotherapy (ice pack or sleeve) to wound over dressings
- > Patient should mobilise further than own room
- Breathing exercises (Triflow or similar)
- > 24 hours of intravenous antibiotics

## Day 1 post surgery

Your nurse will remove your outer dressings. He or she will inject a mixture of pain medications into your knee via a small catheter which was inserted at the time of the operation. Once this injection is complete, the catheter will be removed. The deeper dressings may also be changed at this time if required.

Your urinary catheter will be removed in the morning. You will have some blood tests performed to check your blood counts. A physiotherapist will visit you to show you some knee exercises to perform throughout the day, and to help you with a walk around the ward.

I would like you to keep up the breathing exercises and the ankle and toe movements throughout your hospital stay.

In the evening your nurse will start a daily blood-thinning injection, which will continue until you are discharged. Alternatively, if you usually take blood thinning medications, these can commence instead.



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#### **Nursing instructions:**

- ▶ 15-20 hours post op: Injection into intra-articular pain catheter under strict aseptic technique - 100mL of 0.2% ropivacaine + 10mg ketorolac + 500microg adrenaline: Inject 20ml of this solution, and then the rest as the catheter is being withdrawn slowly. Place an op-site over the catheter site.
- > Remove urinary catheter
- Reduce dressings to single op-site
- Physiotherapy review and exercises
- Blood test (FBC/UEC)
- Continue Triflow
- Calf compressors
- Daily dose of Clexane 40mg s/c to start in AM (continue until discharge)
- No pillow under knee when patient lying in bed

## Day 2-5 post surgery

You will continue with practicing your walking, and performing your exercises. You should stand and stretch your operated leg every 45 minutes. When you are moving comfortably using a walking stick or crutches, and are able to get in and out of chairs or a bed, you are suitable for discharge home. You will be provided with a prescription for pain medication. If you have any surgical clips, these will be removed by your nurse just before you leave. Please do not drive yourself home - please arrange for a taxi if a friend or relative cannot pick you up.

Alternatively, if your progress is slow, or feel you need more time to get used to your new knee, we can arrange for you to be transferred to a rehabilitation hospital, where you can have access to more intensive physiotherapy.

### **Nursing instructions:**

- Continue mobility exercises
- Consider for discharge when:
  - pain well controlled on tablets
  - wound dry
  - walking well with crutches or stick
  - able to straight leg raise
  - knee flexes to 90-degrees
- Alternatively, arrange transfer to a rehabilitation facility.
- Provide patient with a form for an x-ray to be done prior to the first follow-up appointment.
- Discharge on oral aspirin 300mg po d, and esomeprazole (Nexium) 20mg po d until 2 weeks post op.
- Remove any clips immediately prior to discharge there is a subcuticular suture underneath.



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## After discharge

Ensure that you have confirmed the time of your follow up appointment by calling my rooms on 9680 1315, if you have not already done so prior to surgery.

Keep your wound covered at all times. You may shower with a waterproof dressing over your wound. If your dressing starts to come off, replace it with another one from the chemist.

Purchase a simple knee sleeve from the chemist and wear this at all times, except during bathing. This sleeve should not have any supporting struts, inserts, or hinges. They are usually made of neoprene, like wetsuit material. It should not be too tight. If you find it uncomfortable, you can stop using it.

Make contact with a physiotherapist, and commence the protocol on the following pages. Your physio can download a copy of the protocol at: http://kneesurgerysydney.com.au/physios/post-operative-pathways

You can reduce and cease your pain medications as soon as you feel able.

## 10-14 days after surgery

I will see you for your first follow-up appointment. Please obtain new x-rays of your knee prior to this appointment, and bring them with you.

# Please contact Dr Balalla's rooms via phone or email urgently if you suffer from any of the following:

- Worsening pain
- > Fevers or chills
- Increasing redness around the incisions
- Calf swelling or pain which worsens
- Shortness of breath

This resource is provided by Dr Balalla for the information of patients who have had a knee replacement.

To discuss any concerns or the information above, please phone Dr Balalla's rooms on (02) 9680 1315, or email enquiries@drbalalla.com.au.

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# **Physiotherapy Protocol**

## Revision total knee replacement

Please give this protocol to your physiotherapist

STAGE	GOALS
Week 0-2  Aims:  Decrease/control swelling and pain full active and passive extension 90-degree flexion Ability to straight leg raise Full weight-bearing as tolerated  Reduce dressings day 1 post-surgery. Keep waterproof dressings intact. Showering allowed, with wounds covered.  Suitable for discharge when: Mobilising safely on crutches or stick Safe independent transfers Able to straight leg raise 90-degree knee flexion Dry wound	<ul> <li>Pain control with analgesics and cryotherapy</li> <li>Swelling control with compression sleeve</li> <li>Active and active assisted knee flexion</li> <li>Achieve full extension with active and passive exercises</li> <li>Static and inner range quadriceps exercises,</li> <li>Straight leg raises</li> <li>Heel slides in chair</li> <li>Ankle dorsiflexion/plantarflexion exercises</li> <li>Gentle closed chain quadriceps exercises – emphasis on alignment and co-contraction.</li> <li>Start basic proprioception, balance and co-ordination training</li> </ul>
Week 2-6  Review 10-14 days post op for removal of sutures.  Aims:  Full extension and progress flexion  Good activation of quadriceps and straight leg raise with no lag  Improve strength, balance and proprioception  Attain range 0-125-degrees  Wean walking aids	<ul> <li>Swelling management</li> <li>Progress closed-chain quadriceps exercises with co-contraction — double leg wall mini squats, sit to stand</li> <li>Core, gluteal, and hamstring strengthening</li> <li>General flexibility and stretches</li> <li>Static and dynamic balance exercises</li> <li>Lateral stepping</li> <li>Suitable for hydrotherapy</li> <li>Once 100-degree flexion is achieved can start using a stationary bike 15 minutes twice a day</li> </ul>

continued overleaf



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STAGE	GOALS
Week 6+	
Aims:  > Progress range of motion > Normal gait pattern without walking aids > Build endurance	<ul> <li>Progress strengthening exercises. Include eccentric control.</li> <li>Single leg balance exercises</li> <li>Develop program for advanced strengthening and endurance training.</li> </ul>

This resource is provided by Dr Balalla for implementation by a qualified physiotherapist. Every patient's condition is unique and this information may not represent the full physiotherapy management plan directed by Dr Balalla.

To discuss any of the information above, please phone Dr Balalla's rooms on (02) 9680 1315, or email enquiries@drbalalla.com.au.

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