High Tibial Osteotomy Rehabilitation Guidelines

The following is a detailed outline of the rehabilitation regime for patients who have had a High Tibial Osteotomy by Dr. Macgroarty.

Each case can be very different depending on the goals of the patient, the age of the patient, the type of surgery etc. We follow these basic guidelines. Any physician indicated precautions will override these guidelines
Day 1 to Week 4

What to expect:

You will have a large bulky dressing on your leg when you awake after your surgery. This will be removed approximately **72 hours (3 days) after your surgery** by the nursing staff.

You will be required to wear elastic stockings (TEDS) for **six weeks** following your surgery.

It is recommended that you apply ice to your knee to help reduce pain and swelling, up to 30 minutes out of every 2 hours.

It is normal to have knee swelling and bruising following the surgery. It will often increase as your activity level increases.

Walker or crutches should be used until discontinued by Doctor or physical therapist.

If your knee swells, rest and elevate it. Apply ice. It should settle over time. If you are concerned, contact Dr Macgroarty in his rooms on 1300 562 247.

You will not be allowed to swim, either in a pool or the surf, until these wounds are completely healed (approximately 10 to 14 days) and you are allowed to fully weight bear.
Start the following exercises

1. Static Quadriceps
Tighten the muscles at the front of the thigh by straightening the knee. Imagine you are trying to push the back of your knee into the bed. Concentrate on the inner part – just above and inside your kneecap – your VMO muscle.

HOLD 15 secs REPEAT 10 times

2. Straight Leg Raise
Tighten the muscle on the front of the thigh and straighten your knee as straight as possible. Now keep it straight as you lift your heel off the ground about 2-3 inches. Return to the bed. You may bend your other knee up to support your back.

REPEAT 10 times

Milestones

You should be able to ambulate with crutches.

You should be able to transfer from the bed and chair safely.

Brace to remain on at all times until week 6 postop

Discharge criteria: - Safe ambulation
- Independent to ascend and descend stairs
- Understand the home exercise program
Week 4 to Week 6

Start the following exercises

1. **Straight leg raises:** with a maximum of 2lbs weight doing flexion, abduction and adduction.

2. **Hamstring curls**

3. **Heel raises**

4. **Standing terminal knee extensions**

5. **Standing hip abduction**

6. **Standing hip flexion**

7. **Bridges**

8. **Short arc quad**

9. **¼ lunges**

10. **One leg balancing/ balance board**

11. **Pool therapy**

Milestones

Your range of motion should be 0-120 degrees

Continue physiotherapy for exercises instruction, gait training and scar/swelling management

First post-op appointment will be 6 weeks post op, with a postop x-ray

Your return to work will be discussed on the first appointment.
Week 12 onwards

Start the following exercises

1. **Cardio-vascular** - walking, bike, rower, x-trainer, swimming
2. **Flexibility** - hamstring stretch, calf stretch
3. **Squats** - as able
4. **Single leg balance** - challenges with airex, if able
5. **Forward step ups** - advance in 2 inch increments
6. **Forward step downs** - advance in 2 inch increments
7. **Leg press**

Milestones

You should be able to walk on uneven surfaces with/without a straight cane

You should be able to walk without an assistive device on level surfaces

Follow up appointment 6 month post-operative