

Physiotherapy

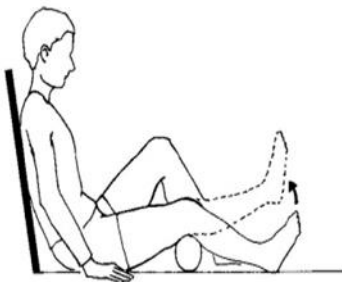
Department of Rehabilitation

Leg Exercises for Stroke Patients

Instructions:

- The patient should do the exercises regularly for 2-3 times a day, repeat each exercise 5-10 times or as advised by the physiotherapist.
- It is all right for the caregiver to wake the patient up for exercise during their hospitalization.
- The patient should perform the exercises under supervision.
- When doing exercises while seated, the patient should sit in a steady chair, preferably with arm rests.
- When doing exercises while standing, have a chair behind the patient and a firm surface for the patient to hold on to.
- When doing exercises while standing, always ensure the patient's weaker knee does not bend backwards (hyperextend).
- Do not pull on the patient's weaker arm.
- The patient should not hold their breath while doing exercises.
- Only do the exercises that are advised by the physiotherapist.
- When supervising the patient to exercise, stand on their weaker side.
- If any of the exercises causes the patient pain, **stop immediately** and consult the doctor or physiotherapist.
- Do not exercise if the patient feels unwell, e.g. feeling giddy, short of breath, chest pain or very tired.

Basic lower limb exercises



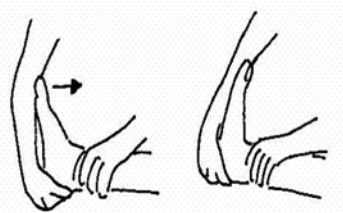
Inner range quads

- Place a pillow or rolled-up towel under a knee in bent position.
- Lift the heel off the bed and straighten the knee.
- Do not lift the entire leg away from support.



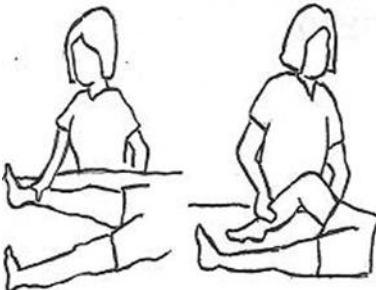
Hamstring stretch

- Support the patient below their knee and heel.
- Bring their entire leg up, while keeping the knee straight.
- Hold the position for up to 30 seconds, or as the patient's tolerance permits.



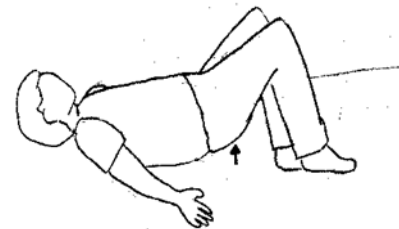
Calf stretch

- Cup the patient's heel with their forefoot resting on your forearm.
- Hold the leg down with your other hand.
- Push the patient's forefoot up gently. Avoid pain.
- Hold for 30 seconds. Avoid pushing only the toes.



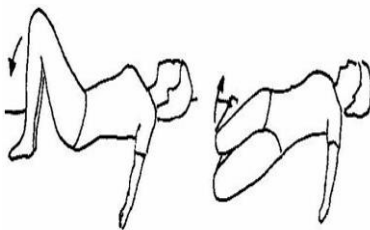
Hip, knee flexion and extension

- Place one hand below the patient's knee and the other hand below their heel.
- Slide their foot towards buttock.



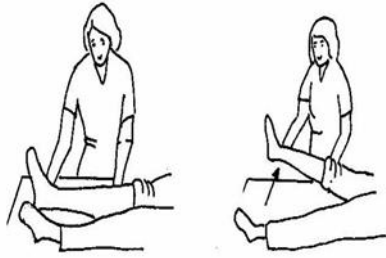
Bridging

- Keep the patient's knees bent up and pressed together
- Caregiver to assist by:
 - Pushing down on the patient's affected knee.
 - Supporting the affected foot.
- Patient to lift affected buttock up.
- This exercise helps the patient to:
 - Move from side to side.
 - Move up and down.



Knee rolling

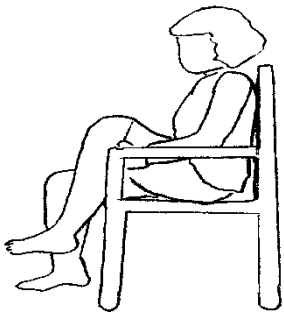
- Lie on the back with knees bent up and pressed together.
- Bring both knees from side to side, keeping both feet on the bed.



Hip adductor stretch

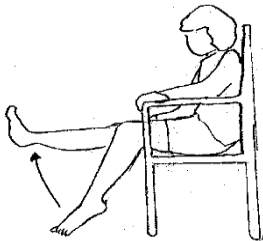
- Support the patient below their knee and heel.
- Bring the whole leg out to the side.
- Hold for up to 30 seconds, or as the patient's tolerance permits.
- Keep the patient's foot pointed upwards
- Allow the patient to bring their leg out if they have the strength.

Advanced lower limb exercises



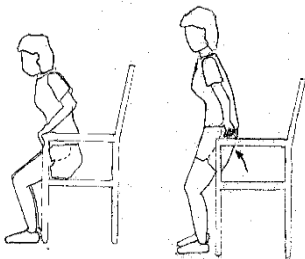
Leg lifts

- Sit in a chair with the back well supported. Lift the affected leg up.
- Do not allow the thigh to turn outwards or the body to forward
- If necessary, patient can use their hand to help lift the thigh off chair surface



Knee exercise

- Sit in a chair with the back well supported.
- Straighten the knee one at a time, then allow it to bend slowly.

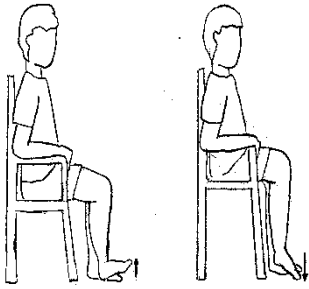


Sit to stand

- Sit in a chair with feet planted on the floor. The ankles should be slightly behind the knees.
- Push gently with the heels, bend at the hips, and stand while keeping the head up.
- The body weight should be equally distributed to both legs.

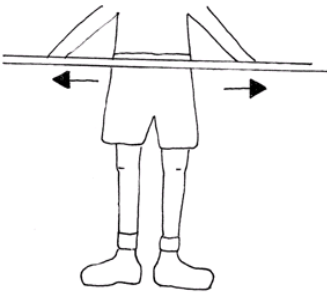
Ankle exercise

- Lift alternate foot off the floor while keeping the heel on the floor.



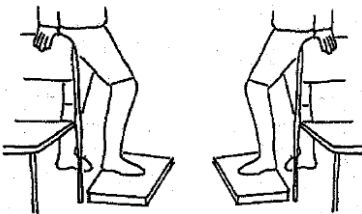
Weight shifting in standing

- Stand with legs apart, feet level.
- Shift the hips to the left then right.
- Keep the hips and knees straight.



Knee control exercise

- Stand with a chair on the unaffected side for support.
- Practise stepping up onto a block with the unaffected leg.
- Keep the affected hip and knee straight and affected heel on the floor.

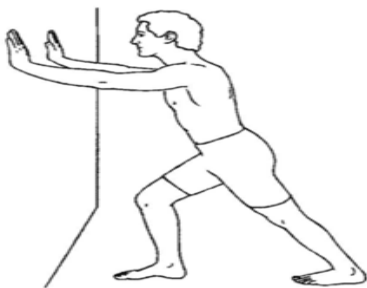


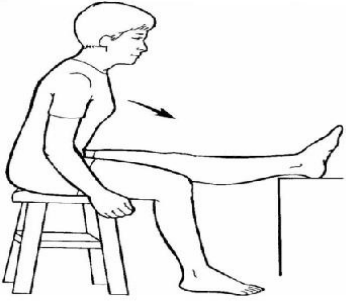
For left sided
weakness

For right
sided
weakness

Calf stretches

- Stand with the **unaffected** leg slightly bent in front, and the affected leg behind.
- Lean forward gently, placing weight onto the unaffected leg until a stretch is felt in the calf of the affected side.
- Keep the back leg straight.
- Hold for up to 30 seconds, or as tolerated.





Hamstring stretches

- Sit with the affected side on a low stool, knee and back straight.
- Lean forward gently at the hips until a stretch is felt in hamstrings of affected side.
- Hold for up to 30 seconds, or as tolerated.

Disclaimer:

The information provided in this publication is meant purely for educational purposes and may not be used as a substitute for medical diagnosis or treatment. You should seek the advice of your doctor or a qualified healthcare provider before starting any treatment or if you have any questions related to your health, physical fitness or medical conditions.