

Hinged knee brace

This leaflet is produced for people who have been provided with a hinged-knee brace by your physiotherapist. It will explain how you should care for the knee brace and other important information about the knee brace.

Purpose

- To allow the knee to flex and extend (bend and straighten) within a given range.
- Provides medial and lateral support (either side of knee).
- Permits functional activity e.g. walking.
- To control instability at the anterior (front) of knee.

Reason for fitting

- Soft tissue injuries e.g. lateral collateral ligament, medial collateral ligament, patella tendon repair, quadriceps tendon repair.
- Patella (knee cap) fractures.
- Fractures involving the lower end of the thigh bone or upper end of the shin bone.
- Osteoarthritis of the knee

Helpful advice

DO:

- Keep the brace and padding dry. It is best to avoid showering/bathing and to have a strip wash whilst seated. Undo each strap individually and wash underneath– never remove the brace without speaking with your physiotherapist or doctor first.
- Tighten the brace regularly. See instructions on page 3.
- Keep the joints above and below the brace moving, as instructed by your doctor/physiotherapist.
- Contact your physiotherapist if you experience any problems.

DON'T:

- Take the brace off (including at night) unless instructed to by a physiotherapist or other member of staff.



- Cut, file, damage your brace or put anything inside your brace.
- Take part in any active sport.
- Do any heavy lifting.

What problems should I be aware of?

If you notice any of the following, please contact the Physiotherapy Department as soon as possible on the telephone number provided at the end of this leaflet:

- Skin redness that doesn't fade after 15-20 minutes.
- Marked increased swelling.
- Sores or blisters on the skin.
- Pain, irritation or rubbing.
- Any damage to the brace that limits its function.

Exercises

The following exercise can be commenced if instructed by your physiotherapist. Each exercise needs to be repeated 10 times and the whole regime 3-5 times daily. On discharge you will be reviewed by a doctor and/or physiotherapist and your exercises will be progressed as appropriate. The brace is usually removed by the doctor or physiotherapist according to the surgeon's instructions and this can be anywhere between 6 weeks and 3 months following surgery, dependent on your individual surgery/injury. Once removed, the brace will be disposed of as they are single use only.

Circulatory exercises

Bend your ankle and point your toes.
Circle your ankles in both directions.
Do a minimum of 10 of each exercise.



© PhysioTools Ltd

© PhysioTools Ltd

The following exercises need to be done 10 times each at least four times a day.

Static quads

Sit with your legs straight out in front of you. Tense your thigh muscles (quads), pushing the knee down into the bed. Pulling your toes towards you may help to make this exercise easier. Hold for a count of 5. Repeat 10 times.



Straight leg raise

Sit with your legs out in front of you and your back supported. Brace your knee and lift your leg two inches, holding it for 10 seconds. Lower your leg slowly. Repeat 10 times.



Inner range quads (within the set knee flexion/extension parameters)

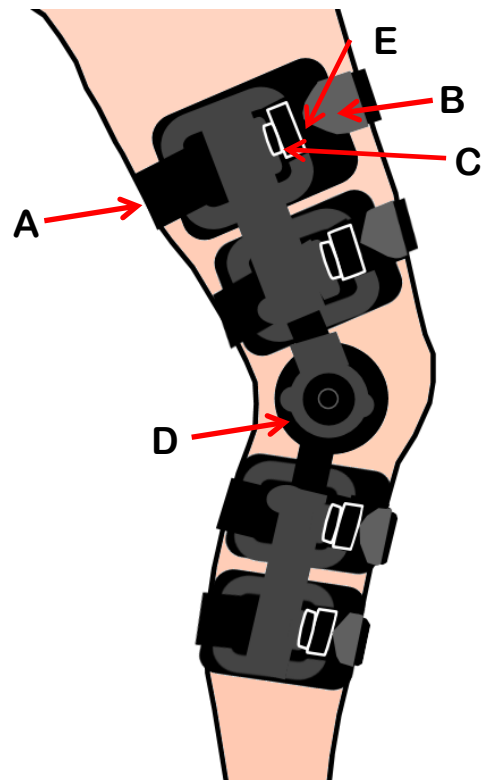
With the leg resting over a rolled up towel lift the foot off the bed until the knee is straight. Hold for 10 seconds, lower the leg slowly. Repeat 10 times.



© PhysioTools Ltd

Adjusting your knee brace if it slips down/loosens.

- On the top most strap (A), undo the Velcro (B) and flick the little rectangular locking 'catch' (C) down.
- Making sure the dials (D) are still both in-line with your knee cap, tighten the strap by pulling on the lower part of the strap (E).
- Flip back the locking catch (C) to hold the tightened strap in place.
- Pull up the slack on the top strap by pulling the excess taut (like when you are adjusting a seat belt).
- Velcro the end of the strap back down.
- It is recommended that you tighten the top and bottom straps first then the two inner ones.
- Try and ensure that the hinges remain in the same position when tightening the straps.
- There should be no need to fully open the brace. Undo the straps one at a time to clean/wash the skin underneath.
- If you are worried about adjusting your brace, ask your physiotherapist to demonstrate while you are in hospital.



Watch this helpful video on fitting and adjusting a hinged leg brace:

https://www.youtube.com/watch?v=uBRCXY_qRtg

Royal Berkshire NHS Foundation Trust Physiotherapy Department
Royal Berkshire Hospital, London Road, Reading RG1 5AN
Telephone Number: 0118 322 7817

This document can be made available in other languages and formats upon request.

Produced by: Orthopaedic Physiotherapy Department, October 2018.

Review date: October 2020