

Hinged Knee Brace

The purpose of this leaflet is to:

- Explain why a knee brace has been provided to you.
- Tell you about the risks and benefits of wearing a knee brace.
- Explain how to put the brace on and off.
- Show some gentle exercises you can do whilst wearing the brace.

If you have any further questions, please speak to a staff member caring for you.

Why has a Hinged Knee Brace been provided to me?

You have been prescribed a hinged knee brace by your orthopaedic consultant. This is usually following an injury or surgery on your knee. It allows the affected area which has been injured or operated on to heal. The brace will be fitted by your physiotherapist and adjusted to size for you.

The brace works by giving support either side of your knee joint. It can be locked to stop your knee bending or unlocked but set between ranges to limit the motion of your knee. These ranges will be decided by your consultant and can be changed at intervals throughout your recovery as required. The brace has been fitted for your use only. Do not adjust it or fit it to anyone else. It is important to wear the brace as instructed to ensure adequate support for your knee and optimal comfort.

For how long do I need to wear the brace?

You should wear your knee brace for as long as directed by your consultant. Your knee brace should be always worn, especially whilst mobilising and even whilst sleeping. You are advised to wear the brace directly next to your skin to get the best fit and to avoid the brace slipping down.

Your physiotherapist / surgeon will fill in the instructions for your brace below:

(e.g., 0-30 degrees)	(e.g., 2 weeks until 02/04/2024)

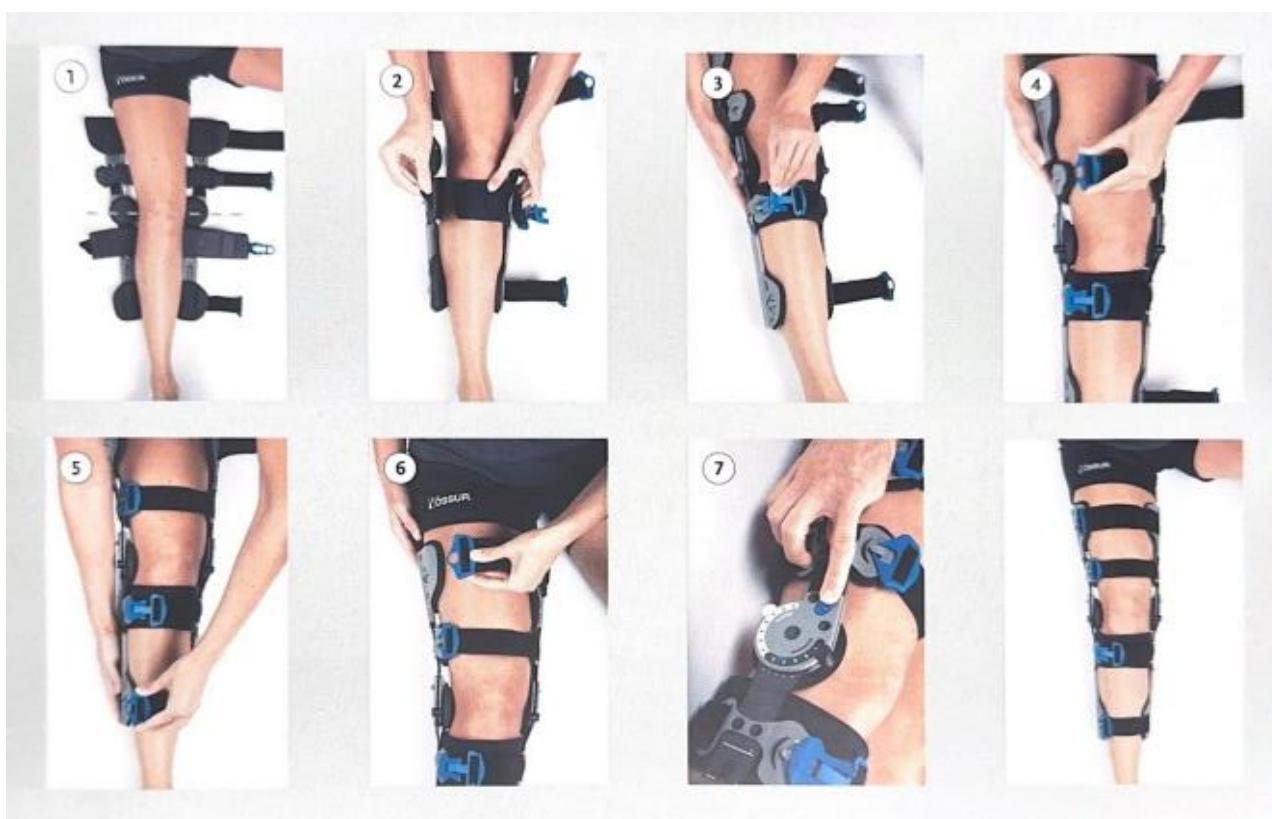
What are the risks of wearing a Hinged Knee Brace?

The main risk of wearing a hinged knee brace is the development of pressure areas on your skin where the brace sits. Your physiotherapist will advise you where to watch out for these. Alternatively, you can monitor the areas yourself around the straps on your thighs and calves.

There may be some red marking of the skin when you remove the brace, which is normal, and the marks should disappear within half an hour. If able, you can loosen the straps while lying to reduce risk of pressure areas. Remember to tighten the straps when standing after lying. It is important to check your skin regularly especially if you have altered sensation.

How do I put my brace on and off?

The brace should be fitted in a lying or long sitting position on a bed. It is possible to fit the brace yourself but it can be much easier to get someone to assist you if available.



1. Open the buckles and lay the brace underneath your leg with your knee positioned centrally between the circular pads. The smaller calf pads should be towards the feet. The second strap down should sit approximately two fingers width above your kneecap (this is different for everyone, is relative to size and therefore may differentiate between people).
2. The braces have numbers by the buckles 1,2,3,4 in order of which strap to fasten first.

3. The strap below the knee has an extra layer of padding (it may vary slightly on different braces) which needs velcroing prior to fastening the buckle. This is the first strap to fasten.
4. The strap above the knee is the second strap to fasten.
5. The strap closest to the ankle is the third strap which needs to fasten.
6. The thigh strap at the top of the brace is the final strap which needs fastening. Ensuring all straps are tight but able to fit one finger comfortably between the skin and the strap, to ensure it is not fastened too tight.
7. Ensure the brace is locked / unlocked to the desired degrees of motion. The above photograph shows the model pushing on a switch to lock / unlock the range of motion at the knee.
8. Finally, ensure the brace is comfortable and in a good position with the hinge at the same level as your knee joint and the straps are fastened.

When can I remove the brace?

The brace can only be removed if instructed by your consultant or physiotherapist.

This should be done in a lying or long sitting position with your leg outstretched straight on a bed. Do not let your knee bend without the brace on.

Washing and dressing

It is advised to wear your clothes over the top of the brace. You may find it best to wear loose fitting clothes. You will not be able to shower or bathe with the brace on and therefore you need to wash around the brace. To do this, simply undo the brace and use a cloth to clean your leg, then dry your skin thoroughly before replacing the straps.

Exercises with the brace

Whilst wearing the knee brace it is advised to perform exercises to help with circulation, keeping muscles strong and your recovery. The following exercises are safe to carry out unless stated otherwise by your physiotherapist. All exercises should be done with your brace on.

1) Static Glutes in lying or upright sitting

Lie on your back or upright sitting with your legs outstretched. Clench your buttocks together and hold this position for five seconds.

Relax and then repeat.

1



2



2) Straight leg raises.

Lie on your back / upright sitting with your affected leg straight. Turn the affected leg slightly out, tighten your thigh muscles, fully

straighten the knee and lift your leg off the bed, keeping your knee completely straight throughout the movement.

Hold your leg above the bed for five seconds, then gently lower to the bed, controlling the movement.



3) Static Quads

Sitting upright on the bed with your legs out straight. Point your toes directly up to the ceiling.

Tighten your thigh muscles, pushing the back of your knee down into the bed.

You should be able to see your thigh muscles tensions. Hold this for three seconds, relax and repeat.



4) Calf stretches

Sitting on the bed with your legs outstretched in front of you. Place a towel or band around the foot of the leg you want to stretch. Hold the towel or band in each hand and pull towards your body, stretching the back of your calf. Your knee should remain straight as you hold this position.



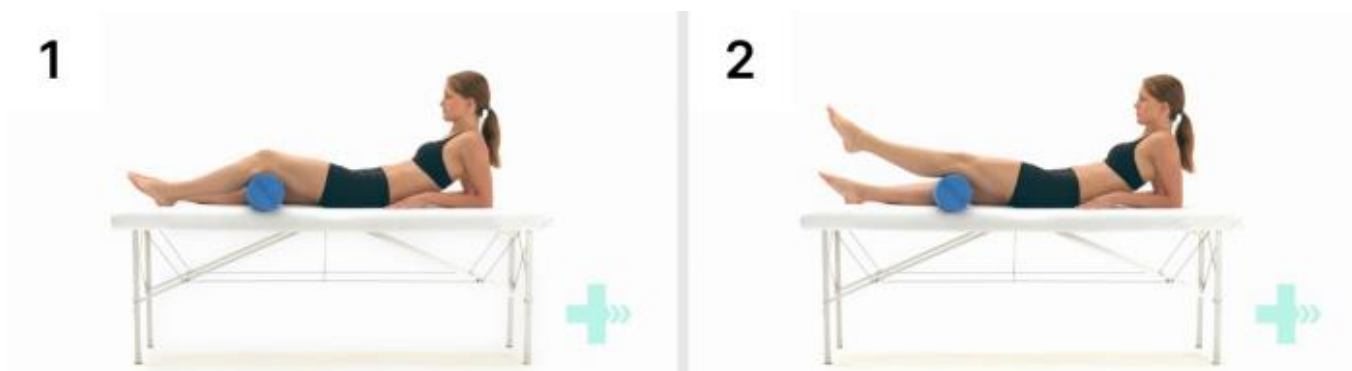
5) Inner Range Quads in upright sitting:

***Please do not complete this exercise if your knee brace is locked in full extension* (or ask your Physiotherapist for advice).**

Lie on your back or upright sitting with a foam roller or rolled towel under your knees, allowing your leg to hang comfortably off the towel / foam roller.

Straighten your affected knee by tensing your thigh muscles. Your heel should come off the table / bed as the knee straightens.

Hold this position for five seconds, then control the movement back down to the starting position and repeat.



Driving

It is advised not to drive while you are required to wear the brace as it may restrict movements and invalidate your insurance policy. Please discuss further with a consultant and / or the DVLA for further information.

Contact us

If you have any specific concerns that you feel have not been answered and need explaining, please contact the Physiotherapy department or the Trauma and Orthopaedics department between 8:30am and 4:30pm Monday to Friday on the direct number below:

Tel. 020 8725 0985 email KneeBracing@stgeorges.nhs.uk

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you advice and information when you have comments or concerns about our services or care. You can contact

the PALS team on the advisory telephone line Monday, Tuesday, Thursday and Friday from 2pm to 5pm.

A Walk-in service is available:

Monday, Tuesday and Thursday between 10am and 4pm

Friday between 10am and 2pm.

Please contact PALS in advance to check if there are any changes to opening times.

The Walk-in and Advisory telephone services are closed on Wednesdays.

PALS is based within the hospital in the ground floor main corridor between Grosvenor and Lanesborough Wing.

NHS UK

The NHS provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

