



Plaster Room

Semi-Rigid (Soft) Cast

Introduction

Semi-rigid (soft) casts are made of a fibreglass casting material that does not set to a completely rigid state, but remains flexible and soft even when it is completely cured. It allows for the clinician to select the level of stability required at the injury site, whilst allowing the rest of the limb to function as normally as possible. This reduces the risk of muscle atrophy (wasting) and joint stiffness to the injured limb due to the stabilisation being provided only where necessary.

Semi-rigid (soft) casts also eliminate the anxiety of removing the cast with a cast-saw as applications can be removed by unwinding or using scissors.

Depending on the type of injury, your cast may extend from your armpit or elbow to your fingers, or from your hip or knee to your toes restricting movement at certain joints associated with your injury. The type of injury affects whether you will be able to weight bear on your limb. You will be informed of your weight bearing status during your consultation. Your semi-rigid (soft) cast is touch dry in 3-4 minutes and reaches full strength in 30 minutes. Please take care of your cast during this time and leave it uncovered to allow the cast to dry naturally during this period.

After your cast has been applied

It is important to take care of your cast and regularly **do** the following:

- ✓ Move your fingers or toes and all other joints not immobilised by the cast, several times every hour
- ✓ Keep the limb elevated (above heart level) when not in use, especially in the first 48-72 hours to help reduce the swelling
- ✓ If a sling has been provided, it should be worn when up and about during the early stages to reduce swelling. Remember to remove regularly and mobilise the joints as advised
- ✓ Wear the cast shoe provided if your clinician has advised you to walk on your plaster
- ✓ Use walking aids as instructed

It is important that you take great care **not to do** any of the following:

- ✗ Get the cast wet as this will cause various skin problems and reduction of your cast's strength
- ✗ Push objects down the cast for any reason eg to scratch, as wounds and ulcers can develop
- ✗ Cut or adjust the cast yourself

- ✘ Attempt to dry your cast with a hairdryer, as your cast will become hot and may burn you
- ✘ Let the limb hang down unless it is being used, especially during the first few days (The limb needs to be elevated at heart level to reduce the swelling).
- ✘ Remove the cast yourself
- ✘ Wear a watch, ring or jewellery on the injured limb
- ✘ Walk on your cast until it is completely dry, and then only if you have been told to do so by your clinician.

Washing and Cleaning

You will have been informed if you may fully submerge your cast in water by your clinician. Once the cast is wet, it is advised to wash through the cast with clean water afterwards and allow for it to drip dry and then dry off with a towel. It may take up to an hour to fully dry out, so please allow adequate drying time before getting wet again.

Exercises

It is important to exercise all joints not immobilised in the cast and to repeat every couple of hours until fully functional. This helps to reduce swelling, stiffness, maintain some muscle strength and improve circulation. This can be painful and difficult to start with but should improve within the first week.

Upper Limb:

- Fully straighten your fingers and then bend to make a fist 5 times
- Circle your thumb and then touch to each finger
- Fully straighten and bend your elbow
- Rotate the shoulder then lift your arm above your head, followed by placing your arm behind your back.

Lower Limb:

- Wiggle your toes regularly
- Fully straighten and bend your knee (if the cast ends below your knee)
- Gently clench the muscles in the back of your calf and thigh to improve blood flow
- Move your hip.

Driving

Your insurance may not be valid whilst you are being treated within a cast. It should be stressed firmly that patients **DO NOT** drive whilst wearing a cast.

Flying

Many airlines require your cast to have been applied at least 48 hours prior to flying or may require your cast to be split beforehand. Please seek advice from your airline before flying.

Semi-rigid (soft) cast removal

Your semi-rigid (soft) cast will either be required to be removed at home by your parent, partner or carer after a specified time frame, or during a face-to-face fracture clinic appointment where it will be done for you. If removing at home, you should remove by either unwinding the cast, or by using a rounded pair of scissors. Try to make sure you advise other clinicians of this should you return to have it removed.

After your cast has been removed

Due to the long period of time that your limb has been immobilised, on removal of your cast you may experience some of the following so do not panic:

- You may find that your limb feels thin and strange; this is normal
- You may experience swelling, discomfort and stiffness in the affected limb. This is quite normal and may continue for several weeks. You may find it helpful to keep the limb elevated
- Your skin may be dry and itchy. Do not scratch; try using baby oil or moisturiser
- Your skin will be sensitive. Be careful if going out in the sun and apply a sun block
- Physical activities eg manual labour, sport etc should be reduced or avoided during the first few weeks after cast removal.

On the day of your follow-up appointment

You may require several treatments during your visit to clinic, such as x-rays and dressings. This, along with varying numbers of patients, means that sometimes you may have to wait longer than we would like so we apologise for any inconvenience in advance.

DVT signs and symptoms

Due to immobilisation and reduced mobility, there is a higher risk of developing a DVT (Deep Vein Thrombosis). It is important to stay as active as possible, drink plenty of fluids and be aware of the signs and symptoms.

Please contact the plaster room or the Emergency Department immediately if you experience any of the following:

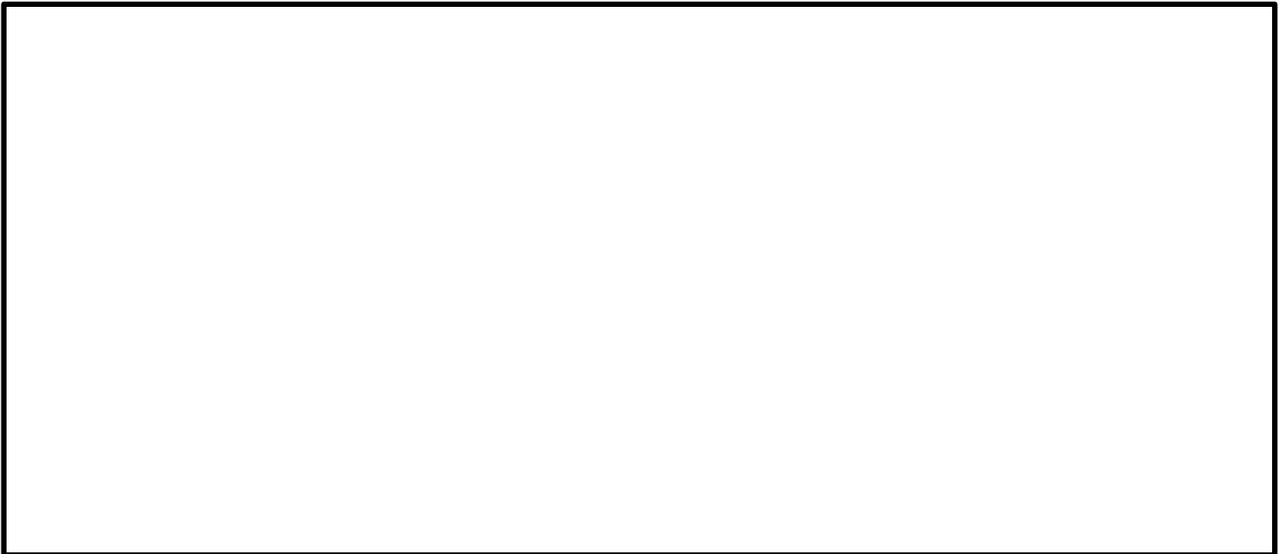
- Pain in the calf, thigh or chest
- Sudden onset of shortness of breath with no physical exertion
- Swelling of the leg
- Increased and decreased warmth of the leg
- Redness in the leg
- Bluish skin discoloration.

Pressure ulcer

A pressure ulcer (sore) is a type of injury that breaks down the skin and underlying tissue. A small number of high risk patients are at increased risk of developing a pressure ulcer, especially in long leg casts, which severely reduces mobility. To try and avoid this:

- Make sure to regularly reposition your leg throughout the day so that you are not constantly resting on the same area for long periods of time (every 2 hours)
- If you notice any discomfort or pain under the cast, most noticeably at the cast edges or heel, please contact the plaster room for urgent review
- Ensure the top or bottom of the cast is not rubbing and leaving red marks
- Do not rest the leg on the heel for long periods of time and place a pillow under the leg.

Further advice and instruction



Contact us

If you experience any of the following:

- Your toes become painful, swollen or blue
- You are unable to move the limb or joints
- You feel “pins and needles” or numbness in the limb
- Any “burning”, “blister-like” pain or severe irritation under the cast
- Discharge, blood staining or wetness under the cast
- If you drop any object into the cast
- The plaster appears too tight or loose fitting
- The plaster cracks or becomes soft
- The plaster has got wet
- Excessive itching

please contact the plaster room where a booked appointment can be made for you to return for assessment. Arriving without a prior appointment may result in longer waits or having to return at a convenient time. Outside of plaster room hours, please contact your local Minor Injuries Unit or the Emergency Department if urgent.

Contact Numbers:

We hope that you have found this information useful. If you have any questions or are worried about anything, please speak to the following Dorset County Hospital Staff:

Orthopaedic Practitioners: James Vincent
 Sarah Nelmes
 Zara Penwell

Plaster Room: 01305 255498

Useful Websites:

<https://www.youtube.com/watch?v=epkJ5r1Ozvlandfeature=youtu.be>

<http://www.fractureinfo.co.uk/casts-splints/soft-cast-removal/>

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk



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