

Children's Therapy Services

Serial Casting

This leaflet explains what to expect when you bring your child in to the Plaster Room for serial casting to treat tiptoe walking.

What is serial casting?

Serial casting is a treatment to improve the movement in the ankle joint that uses plaster casts to stretch the soft tissue (e.g. muscles in the calf) for an extended period of time. This treatment will be carried out in the plaster room and is done by applying a series of casts, usually weekly, while attempting to gradually improve your child's range of ankle movement. Your child may need serial casting for between 2-4 weeks. The number of weeks/casts necessary depends on the level of stretch required.

Aims of Serial Casting

- To increase the length and flexibility of soft tissues (muscle and tendons) and therefore regain movement.
- To reduce the stretch excitability (spasticity) of a muscle and therefore regain movement and function.
- To provide better sensory feedback of good weight bearing in standing and walking by gaining heel contact.
- To improve the fit, comfort, compliance and effectiveness of splints.
- To have longer-term improvements on standing, walking and balance.

What to bring and what happens on the day

When attending for this appointment, please bring with you any toys, books or electronic devices for your child to use as a distraction during the appointment. Your child should wear or bring loose fitting trousers or shorts to allow for application of the casts. Prior to the appointment, please encourage your child to bath/wash the skin, as this will not be possible for a weeks after the cast is applied. Please do not bring other children to the appointments. On the day of the appointment, you will be shown to a bay, where a member of staff will explain the procedure and ask if you have any questions. Protective soft socks and padding will be applied to the child's leg(s) and then, while attempting the stretch, the soft cast will be applied from just below the knee to the toes and special shoes may be fitted to wear over the cast. Your child will not be able to weight bear for a couple of hours after the cast is applied to allow it to dry properly, a hospital wheelchair will be available to use within the hospital to transport your child to the hospital entrance/exit/car park area.

How to look after the cast

The cast must stay dry at all times. Avoid baths and showers. You can invest in a plastic cover or use a plastic bag to protect it from splashes. You may find an assisted wash more appropriate while your child is in the cast. Please speak to the Plaster Room staff if you have any queries. Serial casting is more effective if the child can use their walking/standing aids (if required) and is fully functional as usual during the casting period. Your child will be able to walk, play and go to school with the cast on; however, it may be advisable that they do not take part in PE sessions or contact sports. This is because activities can increase the chances of excessive sweating which causes the padding to become damp and this can lead to soggy skin and developing soreness under the cast. If the skin underneath the cast becomes itchy, do not put anything down the cast to scratch the area. This can break the skin or the object can get stuck causing the object to become embedded in the skin and lead to a pressure sore. You can try blowing cold air down the cast using a hair dryer which could also ease the itch.

Keep the cast elevated as much as possible when not mobilising to reduce the risk and amount of swelling which may occur and improve circulation by wiggling their toes.

Your child may require Orthotics following the casting to maintain the range of movement gained. We will co-ordinate with the Orthotist to make this timely. (It may be necessary to make a removable cast if there is going to be a delay before final fitting of orthosis)

What are the risks of serial casting?

Although every attempt is made to reduce the risk of complications within the cast, your child may experience;

Circulatory complications which would require prompt removal of the cast.

Swelling of the limb under the cast.

Pressure sores/rubbing/soreness, most commonly around bony prominences such as the ankle or heel. If left untreated, this can develop into pressure sores or blisters. As the cast is holding the foot in an unfamiliar position, the foot may attempt to return to the 'tiptoe walking' position within the cast, which can cause this rubbing.

Night spasms - often means the muscle is not accommodating to the stretch applied and if it does not settle needs recasting as a reduced angle of stretch.

A period of muscle weakness post stretch requiring gradual return to pre-casting activities eg sports.

If your child experiences any of the symptoms listed in 'What to look out for', please contact the Plaster Room for advice. As the foot is being casted in an unfamiliar position, your child can struggle with balancing and mobilising in the first few days after casting. This usually improves with time and practice; however, if you see no improvement, please contact the Plaster Room or Physiotherapy.

What to look out for

While the cast is on, your child should not be in any pain but may experience mild discomfort or a stretching sensation. Please regularly check your child for any of the symptoms below and contact the Plaster Room immediately if any arise. If outside of opening hours, please contact your nearest Accident and Emergency Department.

- Pain, numbness, tingling or pins and needles in the limb.
- Rubbing, burning pain at any bony prominences (eg heel, toes, bridge of foot).
- Redness or any other signs of rubbing around the edges of the cast.
- Swollen, cold or pins and needles in the toes.

School Advice

Your pupil is currently having a series of plaster casts applied to their ankle and foot under the supervision of their physiotherapist. They have not broken their ankle or received an injury, but have a tight tendon and muscles at the back of their calf. The cast puts a continuous stretch on these structures and is changed every week to gradually lengthen them. They will need to attend weekly plaster room appointments to have the cast checked and changed.

It is important that your pupil takes weight through their leg and cast as normal as this will help the procedure to work.

DO Encourage your pupil to stand and walk in their normal manner.

- Carry on with normal curricular activities within their normal capabilities.
- Be alert to any reports of any discomfort from the plaster cast and report to their parents or physiotherapist immediately as it may require the cast to be removed.
- Try to elevate the foot on a stool if the child is sat for a long period
- Keep the cast dry to avoid any complications

DO NOT

- Allow the plaster to get wet at all so no outdoor play if it is wet outside.
- No outdoor P.E. if it is wet or muddy.
- No swimming or showers.
- No playing at the water tray.

Other information

If you are concerned or have any other questions, do ask the staff in the Plaster Room, Huddersfield Royal Infirmary, open Monday to Friday 8am to 5pm. Telephone No: 01484 342562.

At other times (out of hours) please contact the Accident and Emergency Department.

If you have any comments about this leaflet or the service you have received you can contact :

Physiotherapy, Children's Therapies

NHS at Broad Street Plaza
Northgate, Halifax, HX1 1UB

Telephone No: 01422 261340

Princess Royal Health Centre
Greenhead Road, Huddersfield, HD1 4EW

Telephone No: 01484 344299

www.cht.nhs.uk

If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਬ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਭੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ,
ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو یہ معلومات کسی اور فارمیٹ کی زبان میں درکار ہوں، تو
برائے مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں۔

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم
المذكور أعلاه"