

Hippo/Rhino Brace

What is DDH?

Developmental dysplasia of the hip (DDH) is an abnormal development of the hip joint. The ball at the top of the thighbone (*called the femoral head*) is not stable within the hip socket (*called the acetabulum*). The ligaments of the hip joint which hold it all together may also be stretched and loose.

The condition is more common in female babies, first born, following a breech (bottom-first) birth and in families where a parent has also had a dislocated hip joint.

Treatment with the Hippo/Rhino Brace

Treatment for DDH consists of an orthosis (a brace) which positions the hips in flexion (with the knees up) and abduction (with the legs apart). This is the optimal position for the hip joint as it provides the most contact between the thigh and hip bones to allow loose ligaments to tighten into the desired position and the hip socket to develop.

The Hippo/Rhino Brace can sometimes be prescribed for your baby post-surgery to maintain their hip position.

The Hippo/Rhino Brace is one type of brace used to treat this condition. It is a lined plastic shell which attaches to your baby with three Velcro straps.

- When putting the brace on, make sure the white foam inside the brace is facing up and that the brace is upright so that the 'tip' of the triangle is facing up toward your baby's head and the d ring is closest to you.
- There are Velcro straps that come from the back of the brace, over the top of the thighs, through the D-ring and back on themselves and a third Velcro strap that comes from the back of the brace, over the tummy, through the D-ring and back on itself.
- Each strap should be fastened firmly around the thigh and tummy - Your orthotist will demonstrate.
- The brace should be sitting directly behind your baby's bottom and extending up towards their lower back and is worn over soft thin pants.

Removal & application demonstrated

Your baby may cry a little or seem unsettled for the first couple of days in the Hippo/Rhino Brace but they should settle down soon after this.



Contact your orthotist if you have any questions or concerns regarding your child's treatment with the Hippo/Rhino Brace.

Key Points to Remember

Wear regime: Your Health Professional has prescribed for your baby to wear the Hippo/Rhino Brace:

- All the time except when changing nappies (24 hour wear)
OR
 All the time except when changing nappies and bathing
OR
 Only when sleeping

Skin Care and Hygiene:

Your baby's skin and the brace must be checked and cleaned daily.
For those who require 24 hour wear in the brace, sponge baths will be necessary.

- Your Orthotist has demonstrated:
- Remove the brace, pants and nappy
 - Inspect the leg for any areas of excess pressure. Pay particular attention to the back of the knees. Some mild redness, similar to that left from the nappy elastic will be seen, however we do not expect any broken skin, blistering or bleeding.

Contact the Orthotics Department if your baby has any broken skin.
We will see you as soon as possible.

- Wipe the legs and the brace with a damp face washer
- Dry the legs and the brace very well with a towel, ensuring the brace is as dry as possible. The straps may remain slightly damp. Do not use a hairdryer or heater for drying the brace.
- Apply a clean nappy and clean pants.
- Put the brace back on, ensuring the straps are firm.

For families who are allowed to remove the brace for an extended time, bath the child as normal. Remember the brace will also need to be cleaned, as described above.
Do not use any powder or cream under the brace.

Femoral nerve palsy

- The femoral nerve runs through the front of the hip joint. By flexing the legs up the nerve can be compressed, temporarily affecting its function. If your baby can kick out (extend) from the knee the nerve is functioning correctly. While femoral nerve palsy is unlikely, this must be checked daily.

Contact the Orthotics Department if your baby cannot kick from the knee.

Nappies and Clothing

- Your baby can wear their nappy and thin pants under the Hippo/Rhino Brace. We do not recommend the use of cloth nappies with the Hippo/Rhino Brace due to their added bulk. The brace must be removed for nappy change. Do not hold the feet together during nappy change. Only thin and soft clothes should be worn under the brace to ensure there is no risk of wrinkles from clothing which may cause pressure issues.

Positioning

- Your baby will be sleeping on its back with the Hippo/Rhino Brace so it is important to alternate your baby's position to ensure the baby does not favour a particular side (left or right) to avoid a "flat spot" developing on their head.
Supervised tummy time decreases the risk of developing a flat spot and will also promote trunk stability, limb co-ordination and head control in an infant. Tummy time should be encouraged and the Hippo/Rhino Brace will not interfere with this.
You will be able to continue breastfeeding with the Hippo/Rhino Brace on but will need to establish a position that is comfortable for you and your baby. A "football" style hold is common.

Transport

- Because your baby will have their legs positioned out to the side they will be slightly wider than usual. You may need to position them differently in the car seat/capsule or look at using a wider model.

Follow Up

- Your orthotist will review your baby in the Hippo/Rhino Brace as required or every three months.

Royal Children's Hospital Orthotics Department. Ph. 9345 9300

<Z:\Information sheets\DDH BRACES\Hippo Rhino Brace info sheet.doc>