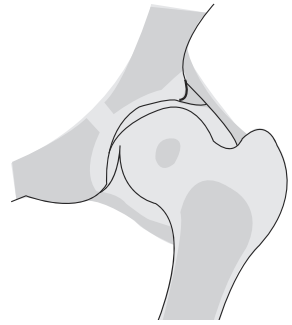


Developmental dysplasia of the hips



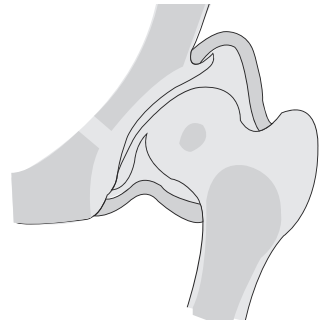
How does a baby's hip grow?

For a baby's hip joint to grow normally the ball shaped head of the thigh bone (femur) needs to be inside the cup shaped socket on the side of the pelvis (called the acetabulum). The head of the femur is held in place by ligaments, muscles and a joint capsule.

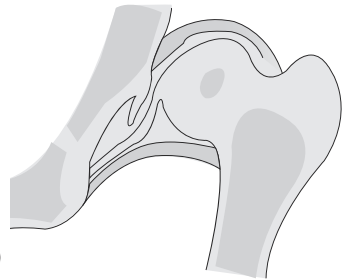


What is developmental dysplasia of the hips?

If the head of the femur is not held tightly in place, the socket may be flatter than usual; this is called acetabular dysplasia. It makes the joint less stable and the head of the femur may be able to move in and out of the socket. This is called a dislocatable or subluxable hip.



If the head of the femur loses contact with the socket and stays out of the joint, this is called a dislocated hip. These are all forms of developmental dysplasia of the hips (DDH).



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(National Association for Children with Lower Limb Abnormalities)

What causes DDH?

Some babies are born with dislocatable or unstable hips because around the time of delivery, hormones in the mother cause ligaments around her birth passage (pelvis) to relax a bit, to make it easier for the baby to pass through her pelvis during birth. These hormones may pass through the placenta to the baby and cause the ligaments around the baby's joints to relax, making the baby's hip joint less stable. As the level of hormones in the baby decreases, the ligaments around the hip tighten again.

Other causes of a hip joint not developing normally are not fully known, but some of the risk factors include:

- genetic factors (this means the problem is more common in families where another person in the family has also had a developmental problem with a hip)
- factors during the baby's development before birth, for example if the baby is in the breech position or has been in a squashed position in the womb
- significant foot deformities (which need treatment)
- significant newborn torticollis (twisted or wry neck)
- It is also more common in first-born baby girls.

Can it be cured?

Yes, dysplastic or dislocated hips can be cured. If found early, the treatment is simple and there should be no long term ill effects.

How are the hips checked?

The baby is laid on his or her back and the hips are moved gently outwards. A distinctive 'clunk' suggests a possible abnormality and the joint may be classed as unstable. The head of the thighbone moving in and out of the socket causes this. 'Clicky' sounds are not always important; a 'clicky hip' can be entirely normal.



Do these tests cause my baby any discomfort?

The manipulation is very gentle and should not cause discomfort, but some babies object to being examined, however gently.

What is an ultrasound examination?

An ultrasound examination of the hips (similar to the scan you had during your pregnancy) can pick up abnormalities of the shape of the acetabulum and head of the femur, or more movement of the head of the femur within the joint than usual. These are not always felt when the hips are tested by hand.



Is treatment necessary?

Untreated, developmental dysplasia of the hip may worsen throughout an individual's life and there is a risk of developing osteoarthritis of the hip at a younger age than normal. If the condition is causing shortening of the leg it is likely to cause problems with the spine, knee and ankle.

What is the treatment?

Your baby will be fitted with a Pavlik harness by the Paediatric Orthopaedic Physiotherapist. This splint holds the legs abducted (spread wide apart). Positioning the legs in this way helps to stimulate the growth and development of the hip socket.



The physiotherapist will need to see your baby usually once a week to check and alter the harness as the baby grows. Appointments for these visits will be made with you.

Your baby will also have regular appointments with the Ultrasonographer to re-scan your baby's hips and monitor their progress.

Caring for your baby in the harness

It is very important that the harness is **not** removed.

Your baby wears the harness next to his or her skin. We will show you how to:

- wash your baby (as you cannot bath them whilst the harness is being worn)
- change his or her nappy
- keep the harness clean

Washing your baby

Make sure you have all you need to hand: warm water, cotton wool, and clean clothes.

1. Undo velcro straps of chest band.
2. Wash under shoulder straps front and back.
3. Refasten chest band straps, allowing a two finger gap so your baby has room to cry and feed.
4. Undo straps on bootee of one leg and remove foot.
5. Wash foot and leg, paying particular attention to knee and groin creases.
6. Dry and replace foot into bootee.
7. Repeat on other leg.

Changing your baby's nappy

Useful tip: place socks over the harness booties to help keep them clean when changing a nappy.

- When removing, replacing a nappy or cleaning your baby, lift them by their bottom and not by their feet.
- When replacing the nappy, make sure all the harness straps are outside the nappy.

Cleaning the harness

If the harness becomes soiled, use an old toothbrush with soap and water to scrub the area and rub dry with a towel.

Dressing

Dress your baby as usual, putting all clothes over the harness, but make sure they are loose and baggy. Remember the harness provides extra warmth, so don't overheat your baby by over dressing or by using too many covers. Several light layers are better, easier to put on and remove. Don't use duvets.

Your baby should sleep on his or her back.

Seating

You should be able to use your usual car seats and prams. Baby carriers and slings keeping babies hips in the harness position are recommended.

Weighing

The harness must not be removed for weighing. The harness weighs 110g - 115g.

Feeding/winding

These are not affected by the harness. Ask your midwife to help you find the best position for feeding your baby whilst the harness is on.

Kicking

Kicking by your baby with the harness on is good. The range of movement is controlled and this helps the hip joint to develop properly.

How long is the harness required?

Your baby will wear the harness until the hip is completely stable. When the Ultrasonographer is happy with the progress, your baby can be weaned out of the harness. The Paediatric Orthopaedic Physiotherapist will teach you how to remove and replace the harness.

Weaning your baby from the harness

Week 1	One hour out of the harness per day
Week 2	Two hours out of the harness per day
Week 3	Four hours out of the harness per day
Week 4	Eight hours out of the harness per day
Weeks 5 & 6	Harness worn at night only

How successful is the treatment?

With early treatment, 99% of unstable and dislocated hips will develop normally. It is very rare for an operation to be needed.

Your baby should learn to walk perfectly normally but don't rush it. Do not encourage your baby to stand until it can be done without help. Crawling and sitting are fine, but avoid baby bouncers and baby walkers.

Any questions?

DDH is not a rare problem and your baby should grow up just like any other child.

If you wish to change your ultrasound appointment please contact:

The Orthopaedic Booking office

Tel: 01736 758892

Physiotherapy booking office:

Paediatric Orthopaedic Physiotherapy team

Tel: 01736 758846

Useful websites

www.steps-charity.org.uk

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

