



Children's University Hospital
TEMPLE STREET, DUBLIN



Treatment of a Child with Developmental Dysplasia of the Hip Information for Parents and Guardians



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Developmental Dysplasia of the Hip

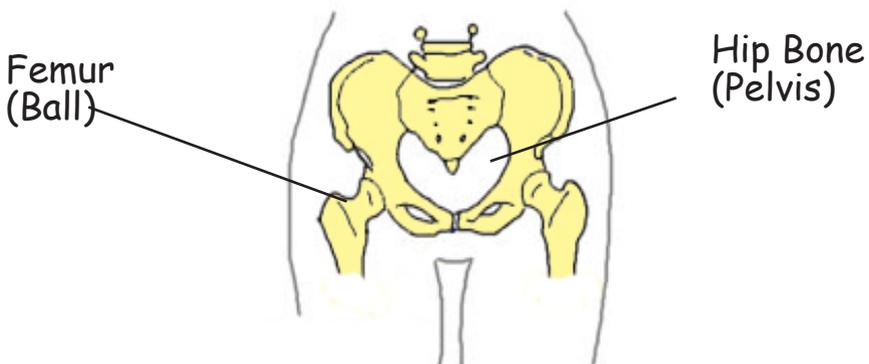
Developmental Dysplasia of the Hip (DDH) is a congenital (present at birth) condition.

In adults and children, the top of the thigh bone (head of femur) fits into a cup-like socket in the pelvis (acetabulum) to make a hip joint. This joint is a ball and socket joint.

In DDH your baby's hip socket may be

- ➡ Shallow.
- ➡ Slipping in and out of the socket as he/she moves.
- ➡ Completely dislocated .

This can affect one or both hips.



Treatment

DDH will not cause pain. However if left untreated it can cause a limp and osteoarthritis (wearing down of head of femur) when they get older.

Children with mild DDH are usually treated with a Pavlik Harness or hip abductor brace. The brace / harness holds your child's femur (thigh bone) in the correct position. Over time the child's hip socket develops which will prevent their joint from dislocating.

Children with more severe forms of DDH may need to have surgery called;

(A) Closed Hip Reduction

(B) Open Reduction

Closed Hip Reduction

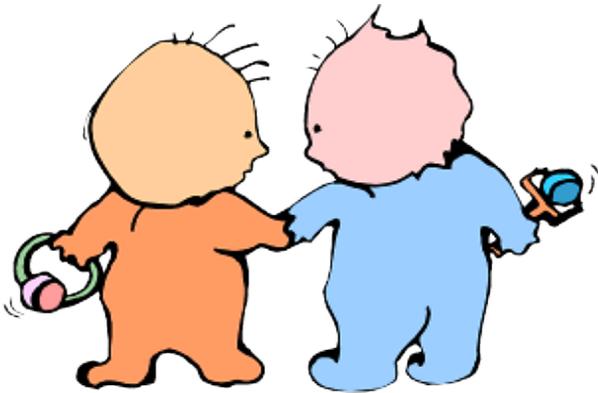
This involves your child going to theatre for an examination of their hips under anaesthetic. While he/she is asleep a dye will be injected into his / her hip joint as it is examined using x-rays. This procedure is known as an Arthrogram.

At this time your doctor may cut the tendon around your child's hip joint if it is too tight. Once this tendon is cut his/her femur (thigh bone) will slip in to the correct position. This is called an Abductor Tenotomy.

To maintain this position your child may be placed in a Spica Cast for up to 18 weeks. During this time the cast will be changed every 6 weeks.

Open Reduction

Some children will need an operation to correct the position of their hip joint. If your child requires this your doctor will discuss it with you in detail.



Hip Abductor Brace

The Hip Abductor Brace is a light weight material designed to support your child's pelvis and thighs. The brace has three Velcro straps that secure the brace in place.

Nappies

You can continue to use the same size nappy for your child that you are using now. The Orthopaedic Nurses will show you how to change and dress your child while he/she is wearing the brace.

Skin Care

A vest should be worn at all times under the brace to protect your child's skin. Cut the legs out of cotton tights and use to protect the skin around your child's legs.

If your child develops a rash or becomes unwell while wearing a brace please contact the Orthopaedic Nurse.

If your doctor does not want the brace removed at all, you can open one strap at a time to wash and change your child.

Positioning, clothing, play, use of car seats and buggy recommended as per Hip Spica Recommendations.

Phone 01 878 4706

or

Phone 01 878 4200 bleep 115 or 900

Hip Abductor Brace



Use cotton tights around your child's legs to protect their skin.



The strap should be loose enough to allow you to place two fingers between it and your child's tummy.

Hip Spica Cast

- ★ Your child's cast is called a Hip Spica Cast. This cast will hold your child's leg and hip in the correct position. Your child may have the cast applied on both legs or on one leg and half of the other leg.
- ★ Some children may also have a bar between their legs for extra support. The bar is not strong enough to use when lifting your child.
- ★ The Spica cast will be applied from your child's toes to his/her chest, with an opening for their nappy.
- ★ The cast is lined with stockinette or gortex next to your baby's skin. A layer of wool is applied between the lining and the cast. A waterproof tape (sleek) is placed around the nappy area for protection.
- ★ Extra padding (felt) can be applied for comfort.



Hip Spica Cast on two legs



Hip Spica Cast on one leg and half of the other with a bar for support

Toileting

The following points about hygiene and toileting are important

Wearing Nappies

- ★ Your baby will need to wear two different sized nappies while in their cast. One nappy should be 1-2 sizes smaller than he/she would usually wear and the other 1-2 sizes bigger than their normal size.
- ★ The smallest nappy with the sticky tags removed is placed inside the nappy opening in the cast. The larger nappy is placed on the outside to prevent leakage and keep the smaller nappy secure. Changing your baby's nappy more often will help to prevent leakage and nappy rash.



Small nappy is tucked inside the cast



Larger nappy is placed over the cast

Older children will need help to use the toilet



Your child can also use a bedpan or urinal (boy)



Hygiene

- 1 Check your child's skin on a regular basis for signs of blisters, irritation, redness, or pressure sores. You may find a flashlight/torch helpful to look inside your child's cast.
- 2 It is important to keep your child's cast dry because it is not waterproof. The waterproof tape (sleek) will help keep the cast dry when you are changing and washing your baby. When washing use a damp cloth and dry with a dry cloth.
- 3 Hair washing may be difficult, two adults may be needed, one to support your child, the other to wash his/her hair.
- 4 Do not use lotions, creams or powders on your child's skin. Powders may "cake" and lotions may make the skin soft causing it to break down easily. Vaseline may be used.
- 5 If the outside of your child's cast becomes soiled from their nappy you can make a paste using a small amount of baking powder / bread soda and water and apply to the area affected. Leave it for a few minutes and then rub off with a damp cloth. This will help reduce the smell and discolouration of the cast.
- 6 If your child is very itchy you can talk to your pharmacist about using anti-histamine medication to reduce this.
- 7 Do not allow your child to poke anything down their cast as this will cause pressure on his/her skin which may cause his/her skin to breakdown.

Clothing

- ➔ While wearing the cast your child will need to wear larger size clothes than he/she would normally wear.
- ➔ For girls dresses or skirts are suitable with tights or socks over the cast to keep his/her toes warm.
- ➔ For boys, tracksuit bottoms or babygros' with poppers along the inside are most suited. Trousers will need to be a larger size. Socks can be worn to keep your child's toes warm.
- ➔ If your child has a support bar his/her tracksuit bottoms / trousers can be cut on the inside seam, velcro can be used to keep them closed.
- ➔ The cast will keep your child's body warm, he/she may need less blankets, especially at night.



Positioning

- ➔ Allow your child to move his/her joints, legs or toes that are not covered by the cast.
- ➔ At night to help urine flow naturally lie your child on his/ her back at an angle supported by pillows under their mattress. This position will help to prevent pressure sores on your child's back and bottom
- ➔ If required cotsides / bed sides can be bought to prevent your child from falling out of his/her bed.
- ➔ Your child can lie on their tummy face down lying on one or two pillows with legs supported by rolled up towels or a pillow (see below).



It is important that young children are not left unsupervised when in a spica cast as they will have limited movement.

Positioning

- ➔ A bean bag can be used to support your child lying or sitting.
- ➔ Take care that the bean bag is supported against a wall or sofa to prevent it collapsing.
- ➔ Children should be supervised when using bean bags.
- ➔ Bean bags should never be used at night time .



Buggy

- ➔ Your child's buggy or wheelchair in an upright position may be the best position for feeding.
- ➔ Depending on the position of your child's cast you may need to change their buggy or wheelchair. A buggy without sides would be most suitable.



- ➔ Due to extra weight of the cast care should be taken when using a highchair as it may tip over.

Car Seats

You will need a suitable car seat when your child is discharged to allow for safe transport home.

Car seats need to have a flat base with low sides.

Please refer to the correct age, weight and height for your child when purchasing car seats.

Lifting and Moving

- ➔ While wearing a cast your child will be heavier than normal and more awkward to hold.
- ➔ Lift him/ her by placing your hand under his/her bottom and lifting them close to your body. This will ease the strain on your back.
- ➔ Avoid lifting your child under his/her arms.
- ➔ Most children will not be able to move or walk in his/ her spica cast. A few may be able to move using a walking frame
- ➔ As climbing stairs may be difficult, you may need to consider allowing your child to have their naps down stairs.

Play / Activities

Your child will have difficulty in moving normally. Other play activities can be used such as;

- Board Games
- Books
- Drawing
- Visual Play such as Computer Games
- Children's DVD
- Crafts

Wheelchairs

If your child is too big for a buggy he/she will need a wheelchair or large chair. Before your child is admitted to hospital for his/her cast please organise a wheelchair or large chair by contacting our Orthopaedic Occupational Therapist at 01 878 4542

Contact the Orthopaedic Nurse If:

- ★ Your child is vomiting on a regular basis but looks and feels well, his/her cast may be too tight.
- ★ You are unable to place your hand under your child's cast around his/her tummy and chest area.
- ★ There is a strong unpleasant smell from the cast.
- ★ You notice a crack or break in your child's spica cast.
- ★ The cast becomes soft.
- ★ Something falls down or gets stuck down the cast.
- ★ If you have any questions about buying equipment please discuss it with our Orthopaedic Occupational Therapist at 01 878 4542

Or if you have any questions
Phone 01 878 4706 or 01 878 4200 bleep 115 or 900

Important

Please Seek Medical Attention If Any of The Following Happens:

- ➔ Your child's toes become very pale, blue, dusky or they become a different temperature to the rest of his/her body.
- ➔ Your child has persistent pain in his/her joint.
- ➔ Your child has swelling around his/her toes.
- ➔ Your child's cast is blood stained.
- ➔ Your child has prolonged nausea and vomiting.
- ➔ Your child has abdominal (tummy) pain.
- ➔ Your child has a swollen tummy.
- ➔ Your child has constipation.
- ➔ Your child has problems passing urine.
- ➔ Your child is restless.
- ➔ Your child has prolonged crying.
- ➔ Your child has problems sleeping.
- ➔ Your child has pressure around the outside of the cast e.g under arm or around his/her tummy.

Orthopaedic Health Professionals

Orthopaedic Nurses

Ailish Mc Intyre CNM2 RCN,RGN

Orthopaedic Practitioner

Anna Wade RCN,RPN

Orthopaedic Practitioner

Orthopaedic Health Care Assistant/Technician

Bora Duruer HCA

Orthopaedic Practitioner

8am - 5pm Monday, Wednesday, Thursday, Friday
8am - 3pm Tuesday

Direct Line ; 01 878 4706 or 01 878 4200

Bleep 115 or 900

Outside these hours please contact the
Emergency Department

01 878 4200

Orthopaedic Occupational Therapist

01 878 4542

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