

CHILDREN'S WARD SOUTH INFIRMARY VICTORIA UNIVERSITY HOSPITAL, CORK

DDH & HIP SPICA

Parents & Carers Guide



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DEVELOPMENTAL DYSPLASIA OF THE HIP (DDH)

WHAT IS DDH ?

The hip is a ball and socket joint. Normally the top of the thigh bone (femur) has a round ball shape called the head, which fits into a cup-like socket in the pelvis (acetabulum). A subluxed (loose) or dislocated hip can occur when the head of the femur is not held tightly in place. It is a painless condition but will require treatment.

WHY SPICA CAST?

Babies are routinely examined at birth and some may require further check-ups at later intervals. Sometimes the problem may not be detected until the child begins to walk and may have developed a limp.

The current treatment for DDH depends on both the severity of the condition and the age of the infant/child at the time of diagnosis. Some may require a light-weight brace to wear. Children that require further examination/surgery under anaesthetic will most likely have the application of a spica cast during this procedure. This cast will hold the child's leg and hip in the correct position.

WHAT IS A SPICA CAST?

A Spica Cast is a fibreglass cast which covers the child's lower limbs and abdomen. The cast is applied in the operating theatre while the child is under anaesthetic. A gortex lining is used to protect the child's skin. Soft cotton wool is wrapped around the area to be casted and then the casting is applied. An area is left open in the groin for toileting needs. Waterproof tape (sleek) is applied to the cast edge in this area for protection.

NOTE: Your child may have an arthrogram while under anaesthetic where a dye is injected into the hip and x-rays are taken. This gives more information about the hip than a plain xray.

NOTE: It may be necessary to perform a small incision in the groin area while the child is under anaesthetic to allow for easier positioning of the hip. This is known as an "Adductor Tenotomy".

Following the removal of the spica cast, your child may need to wear an abduction brace to maintain correct position. Sometimes a bachelor cast is applied. This cast covers both legs with a bar between.

CARE OF SPICA CAST

A team of staff on the ward will show you how to care for your child in the cast and you will be encouraged to participate in your child's care during their hospital stay. There is no need to be nervous, your child can be picked up and cuddled.

SKIN CARE

Skin around/beneath the edges of the cast should be checked regularly for areas of rash, redness or blisters. You may find a flashlight helpful for this.

Observe that your child's toes/feet are warm and pink with normal active movement.

Remember your child will continue to grow with the spica cast on, so check regularly to make sure the cast is not too tight.

Cast care and skin care are closely linked. If urine or bowel movements are allowed to remain in contact with your child's skin (i.e. a wet or soiled nappy) or beneath the edges of the cast, nappy rash and subsequent skin breakdown are likely. Therefore, it is essential that all care is taken to prevent any skin irritations.

A foul smell, hot spots on the cast and an irritable child could be a sign of infection/skin breakdown under the cast.

POSITIONING AND LIFTING

Children in a spica cast cannot move easily so their position will need to be changed often to prevent skin problems and provide maximum comfort.

Position changes should be made every 2 – 3 hours and as much as possible overnight.

Keep your child in a semi-sitting position as much as possible and always make sure that he/she is secure and cannot roll or fall. Bean bags are a good form of seat to position your child in but should always be used under supervision and never at night time.

When changing your child's position check that the cast is not too tight around the edges (tummy, groin, ankles/knees). Heels/feet should be able to move freely after each position change - a pillow or rolled towel may be used depending on the type of casting.

Children should also be positioned on their stomach for short periods of time - supported by pillows and under direct supervision of a responsible adult.

The cast will increase your child's weight, therefore care is needed when lifting. Do not lift the child under their arms, instead support them under the buttocks. Never use the bar of a bachelor cast to lift the child.

When lifting the child, keep him/her as close as possible to your body to help prevent straining to your back. This also helps your child to feel secure

HYGIENE AND TOILETING

The spica cast is NOT WATERPROOF therefore it is not possible to bath your child. Sponge wash your child but always make sure the cast stays dry.

When cleaning the skin it is a good idea to check the skin at the plaster edges for any signs of rash, redness, bruising or blisters.

Hair washing can be done over the sink or bath and will require the help of another person.

Great care must be taken around the nappy area to prevent soreness. Nappies will need to be checked every 2 - 4 hours and changed if wet or soiled, to help prevent leakage and nappy rash. It is advisable to check at intervals during the night. Keep the cast and padding clean and dry to prevent nappy rash. Avoid the use of lotions, creams and powder, as this can cause skin irritation. Powders have a tendency to "cake" and lotions will soften the skin making it easier to breakdown.

Your baby will need to wear two different sized nappies while in their cast. A small/newborn nappy with sticky tags removed is placed <u>inside</u> the nappy opening in the cast. The larger nappy is placed on the outside to prevent leakage and keep the smaller nappy secure.

Older children can use a urinal or bedpan for toileting. They can be lifted onto the toilet making sure they are sitting as upright as possible.

FEEDING/DIET

Ensure your child is well propped up at feeding times to prevent reflux and reduce the risk of choking.

Use a large bib or towel to prevent food from falling inside the cast.

For breastfeeding mothers you will need to find a position that suits you both, so be prepared to experiment at first.

If your child is eating solids give them smaller/more frequent meals due to cast restriction on their tummy.

Encourage a high fibre diet and plenty of fluids to prevent constipation.

Avoid introducing new fruit or foods in the first few weeks as this can cause loose stool/diarrhoea which in turn can soil the cast.

High chairs are usually not suitable.



<u>CLOTHING</u>

Loose comfortable clothes with sizes bigger than the child's age tend to fit well.

Vests with a high neck and poppers which fasten at the nappy area are useful as they prevent small children letting objects fall into the front of the cast.

Your child's feet can get cold even in hot weather so socks over the cast will help keep them warm and comfortable.

Trousers, shorts and underwear can be adapted using Velcro.

The spica cast will act as a natural insulator. Therefore your child may need fewer clothes/blankets on them, especially at night.

<u>SAFETY</u>

It is dangerous and illegal for your child to travel in a car unrestrained. Before you leave the hospital you must have a suitable car seat.

Car seats that have a wide seat with low/flat sides/extra long adjustable strap to reach locking mechanism (birth to 4 years) are most likely to accommodate babies in spica casts.

On the day of surgery please bring your child's car seat to the ward to avoid delays on discharge.

Most buggies are suitable. Whatever style of buggy/pram you use, it is essential that your child is always strapped in securely.

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PLAY AND ACTIVITY

Your child will adapt very quickly. Continue with their regular routine as much as possible.

Play is vital for child development and should be actively encouraged.

Even though your child will be restricted physically, he/she will rely more on craft activities and imaginative aspects of play. Use books, audio books, music, drawing and television.

Toys should be within easy reach and frequent change of scenery will help with boredom.

Ensure your child or other children do not stick small parts of a toy into the cast as this could damage the cast and also cause skin infection.

Interact with your child as much as possible - their language development often leaps ahead.



NIGHT TIME TIPS

Initially your child may wake more often during the night due to discomfort. Changing their position and nappy change relieve this.

For babies who are prone to wind and colic, a little more time spent winding after feeding is time well spent.

Fewer blankets may be needed as the spica cast acts as a natural insulator. Socks will keep the feet warm.

REASONS FOR CONCERN

Toes pale/blue in colour, cold to touch, swollen and unable to wiggle.

An older child may complain of tingling/ numbness of toes.

Cast becomes blood stained or smells, and child may have a fever.

Any blisters/cuts in skin around or beneath the edge of the cast.

Child has new pain that doesn't improve with change of position, calpol (paracetamol) or neurofen.

Persistant fever that cannot be explained by a cold, teething, ear infection or other viral illness.

Cast appears soft, cracked or broken.

Cast feels too tight or too loose.

Something falls into the cast and gets stuck.

FOLLOW UP

Your nurse will arrange a follow up appointment for your child in approx. 6 weeks time for a change or removal of cast. You will receive this by post. A letter will also be sent to your GP regarding your child's treatment while in hospital.

CONTACT DETAILS

- If you wish to speak to the Plaster Nurse in SIVUH Outpatients Department (021) 4926175 Mon to Fri 9am -5pm
- Emergencies outside these hours will be seen at Cork University Hospital Accident & Emergency Department (021) 4546400
- If you have any concerns contact SIVUH Children's Ward (021) 4926100

USEFUL WEBSITES

www.steps-charity.org.uk www.hipdysplasia.org www.sivuh.ie



We hope you enjoy your stay with us on the Children's Ward



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