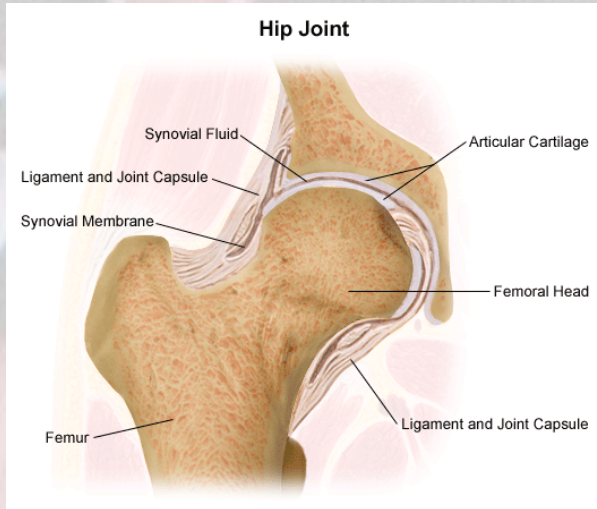


CARING FOR THE INFANT/CHILD IN A SPICA CAST

INTRODUCTION:

Taking care of a child in a hip spica cast can be a difficult experience for both you and your infant/child. This information sheet will help you care for the spica cast, avoid common mistakes and problems, and decrease overall stress and anxiety.



A spica cast is most often needed in infants with developmental hip dysplasia (DDH) and in infants/young children (<5-6 years) with femur fractures or after hip/pelvis surgery. The length of time that your infant/child needs to be in the cast varies from about six weeks to three months depending on the condition being treated. The actual position of the body and legs in the cast will also vary slightly depending on the reason for the casting. A hip spica cast usually takes 1-2 hours to apply, and is done under anesthesia in the operating room. Your infant/child will typically spend one night in the hospital on the infant/toddler unit (Ellison 17/Ellison 18) at **MassGeneral Hospital for Children**. This allows us to make sure the cast is comfortable and well tolerated. Additionally, the pediatric orthopaedic team and nurses on the floor can assess your overall level of comfort in managing the cast. If the cast will need to be on for greater than six weeks, the cast will usually need to be changed in the operating room. After a spica cast change, your child will be discharged home from the hospital on the same day (will not be admitted overnight).

Handling the cast may be a bit awkward at first, but you and your infant/child will quickly become accustomed to it. The Mass General Hospital *for Children* staff are here to help you and your child through this. **REMEMBER: BE PATIENT, YOU WILL GET THROUGH THIS!!!!**

CARE OF THE CAST:

Most spica casts today are made of fiberglass. A fiberglass cast usually dries quickly after it is applied. They are usually completely dry about one hour after applied, and fiberglass casts weigh much less than plaster casts. To avoid skin problems, it is extremely important that the cast be kept as dry and clean as possible. Keeping the cast clean and dry is challenging for all caregivers. To help prevent skin breakdown, the spica cast is lined with a *Goretex Pantaloons* liner. This helps protect the cast and padding from becoming soiled from moisture.

Please note: You may want to put something over the cast (such as an older t-shirt) as the fiberglass can be rough and may damage clothing or other materials.



KEEPING THE CAST DRY AND CLEAN:

This is usually the most difficult aspect of caring for an infant/child in a spica body cast. For infants and toddlers, diaper and skin care can often be a challenge. **The general rule of thumb is to keep the infant/child as normal as possible, and the cast as dry as possible!** If urine or bowel movements are allowed to remain in contact with the skin (such as under a wet or soiled diaper or beneath the edges of the cast) diaper rash and subsequent skin breakdown are likely. For infants and toddlers, diapers will need to be changed very frequently (about every 2 hours during the day and every 3-4 hours at night). A smaller diaper or incontinence pad is usually placed under a larger diaper which then goes over the spica cast. You should experiment with various pads, newborn preemie diapers, and incontinence pads until you find the right one for your infant/child. Every child's urinary and bowel routines are different. It is generally a good idea to allow the diaper area to be open to air for a few minutes each day. This will decrease the possibility of diaper dermatitis (rashes) and skin irritation.

WHAT DO I DO IF MY CHILD'S SKIN BECOMES REDDENED OR IRRITATED?

This is a very common problem with hip spica casts. The diaper area tends to be the most common area of skin irritation/skin breakdown. This is usually caused by moisture from urine/stools that irritates the skin. You should definitely check the skin at least 2-3 times a day for any redness or areas of irritation. Positioning and frequent diaper changes are the key to avoiding the common problem of skin irritation.

It is always MUCH easier to prevent skin irritation/skin sores, than to heal them. If skin redness or irritation is to develop, the general rule of thumb is to allow it to be **OPEN TO AIR** if possible. It is not a good idea to put lotions, creams, or powders down the cast as this will often make the skin condition worse. A hair dryer on a **COOL** setting (**NEVER WARM OR HOT**) held at least 10-12 inches from the cast may help the damp portion to dry. Please call our office at (617) 726-8523 if you have any questions or concerns or if you feel that the cast is moist/wet.



COOL SETTING ONLY!!!!!!!

If itching is a problem, first try the cool hair dryer and position changes. In general, the itching will decrease as your child becomes accustomed to the cast. **NEVER** stick anything down the cast to scratch the skin!! This will often lead to skin irritation and could also cause a secondary skin infection. If you find that your child has put something down his/her cast, you should contact the office to schedule an appointment.



If you are concerned about skin redness or skin irritation, you can always contact our office at (617) 726-8523

SHOULD THERE BE ANY CHANGES IN MY INFANT/CHILD'S DIET?

As always, nutrition is very important. There are a few things you can do to help prevent problems associated with being in a cast. Feeding your child fresh fruits, vegetables, and whole grain breads (increasing fiber) will often help prevent constipation. It is also important to drink plenty of water and juices to prevent dehydration. The first few weeks in a spica cast are generally not a good time to introduce new foods in a child's diet. New foods have a higher likelihood of causing loose stools or diarrhea. If this occurs, diaper changes will need to be made more frequently and skin care becomes even more important. If the cast does get soiled or your child has diarrhea that is in the cast, please contact our office immediately.

If your child complains of a tight feeling in the cast and being full, you may want to try giving smaller, more frequent meals. To prevent food from falling down into the cast while eating, a large shirt or towel should be used to cover the front of the cast.

WHAT SHOULD MY INFANT/CHILD WEAR WITH THE SPICA CAST?

The hip spica cast will add extra bulk, so larger clothing will often be necessary. Your infant/child will be most comfortable if kept cool. Sweating under the cast can cause itching. He/She may not need much clothing over the spica cast, especially in the summer months. For the majority of patients, a t-shirt, nightshirt, or loose dress may be the only clothes that are needed. In addition, a larger sized one-piece outfit (Onesies) may be used in infants/young toddlers. Young children may want to wear clothes that cover the cast more. Large t-shirts, pants that button up the side, loose dresses, etc can usually be worn over the spica cast. Clothes can also be adapted by cutting the seams as necessary and sewing in Velcro. Again, it is a good idea to experiment with several different types of clothes and see which one works best for you and your child.

HOW DO I KEEP MY INFANT/CHILD CLEAN WHILE IN THE SPICA CAST?

You should give your child a sponge bath daily while he/she is in the spica cast. Be very careful **NOT** to get the cast wet. The skin around the spica cast should be washed with gentle soap and water. Do not put anything under the cast, including lotions, powders, or oils. Lotions can often macerate and soften the skin, making it easier for the skin to break down. Powders have a tendency to "cake" under the cast, and again lead to further skin irritation. While cleaning the skin daily, it is a good idea to check carefully beneath the case edges for areas of skin irritation, redness, blistering, open areas, or pressure spots. It is often helpful to use a flashlight to look down cast edges for any area of skin irritation.

TURNING AND POSITIONING YOUR CHILD IN A HIP SPICA CAST?

While in the hospital, you will learn how to turn and position your child. Frequent position changes and turning will often help prevent skin irritation and skin breakdown. The child in the hip spica cast should be positioned frequently, usually about every 2-3 hours during the day. Turn your infant/child on his/her back, sides, and stomach. Keep

heels free of pressure by placing a rolled towel or small pillow under to calf of the leg. Your child may sit propped up with cushions or pillows. Make sure that your child is secure and cannot roll or fall. Strollers, bean-bag chairs, and wagons can usually be adapted so that your child can play and eat in different positions throughout the day. **NEVER** leave a child unattended while in any adaptive equipment.

Small children can often be pulled in a wagon, while older children will often find a reclining wheelchair most comfortable. It is important to provide activities for your child throughout the day. To allow for some independence, place things within easy reach so your child can get them safely. Bringing your child for walks or into an area with the family will help avoid isolation. To provide comfort, you should be encouraged to hold infants and small children when possible. [Your child can do anything that does include standing or walking and that does not wet or break the cast.] Do not allow your child to play with very small toys that can get lodged inside the cast.

WHAT DO I DO ABOUT A CAR SEAT WHILE MY CHILD IS IN A HIP SPICA CAST?

Your child's safety is very important to us. Therefore, all newborns, infants, toddlers and children should be properly restrained even when in the spica cast. It is often possible for your infant/child to fit into their regular car seat in the cast. It is recommended that you bring the car seat up to the inpatient floor after surgery to determine if it will accommodate your infant/toddler in the spica cast. Some patients will not fit into their standard car seat while in the spica body cast. Oftentimes, minor adjustments can be made to the current car seat. If it is not possible for your child to fit into their regular car seat, it may be necessary to purchase a larger (toddler size) car seat for your infant/child. The *Britax Hippo Car Seat* is designed for infants and toddlers in a spica body cast. Information on the Hippo car seat can be found at www.adaptivemall.com/hippocarseat. You can also call (800) 371-2778 to find more information on the Hippo Car Seat. If you are unable to purchase or obtain a car seat that your child can fit into, it will be necessary to have him/her transported home and to follow-up office appointments via ambulance or chair car services.



7 month-old girl on spica table designed and built by her father

WHEN SHOULD I CALL THE PEDIATRIC ORTHOPAEDIC CLINIC WITH QUESTIONS?

You can always reach us with questions or problems related to your child's spica cast. We will often schedule a follow-up visit about two weeks after the spica cast is applied. You should call us immediately if you see:

- **Any breaks or blisters of the skin under the cast or around cast edges**
- **Toes are pale or blue in color and/or feel cold. If child is unable to wiggle toes, but was able to do so before the cast was applied. If child complains of tingling or numbness or toes**
- **The infant/child has a persistent fever over 101F which cannot be explained by a cold, ear infection or other viral illness**
- **Any softening, breaks, or cracks in the cast**
- **Prolonged, unexplainable fussiness or irritability**
- **There is drainage you have not seen before or if there is an unpleasant or foul odor coming from the cast**
- **The cast gets wet or soiled with urine or stool**
- **Your child has new pain that does not get better with Tylenol or Motrin or with the comfort measures explained above (position changes, etc)**
- **Something falls into the cast and gets stuck**



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