Cast: Hip Spica

Your child has been placed in a hip spica (SPY-ka) cast. This has been called a body cast in the past. A hip spica cast keeps your child's pelvis and one or both legs from moving. This type of cast is used if a child has a broken bone in the thigh or has had hip surgery. The cast holds your child's leg(s) in the right position for healing. It is made of Fiberglas® casting tape. It will be put on in the operating room.

This cast will cause changes in your lives for a while, especially if your child is used to doing most things for themself. Your child is now very dependent on you and other people. They will need help with eating, bathing and going to the bathroom, as well as other daily activities. Someone will have to turn and position them regularly. They cannot be left alone at home because of the danger of falls and injury.

You will need patience while your child is in this cast. It may be hard for the whole family to adjust but it can be a positive time as well. We hope to help make this adjustment as easy as possible for you and your child.

**Items needed for home care**

For your child to be ready to come home, it may be helpful to have:

- Pillows, blankets - (which will be used for support and positioning of your child in the cast).
- Bean bag chair - optional (not recommended for infants or toddlers)
- Diapers, 2 sizes (if your child is not toilet trained or does not have good bowel or bladder control)
- Wagon or stroller (for infants or toddlers)
- A wheelchair. Your child's provider may arrange for your child to have a reclining wheelchair if your child is big enough and old enough to need one. This may be
arranged if your child is admitted to the hospital (Picture 1). If this is prescribed in
the clinic setting, call your insurance company to see if your insurance will approve
a wheelchair rental and if they have a preferred vendor. If needed, our staff will
give you a list of vendors that may have an appropriate wheelchair.

After the cast is applied

• A Fiberglass® cast takes about 24 hours to dry.
• Do not write on the cast until it is completely dry. When writing on a cast, use
water-based felt tip markers or pens. Do not use paint or oil-based materials.
These clog the pores of the cast and do not allow the cast to "breathe." Do not
decorate the cast with duct tape.

Turning and positioning

You need to turn your child on their side, back and stomach as tolerated depending on their diagnosis and procedure. Staff will provide individualized
education. If able, change your child’s position every 2 to 3 hours during the
day, at night if your child is awake, and as needed.

Turning helps to make your child more comfortable, reduce swelling and prevent
pressure sores. Turning also helps to prevent pneumonia and keep up your child’s
strength.

• To make turning easier, have your child’s arms raised above their head while you
are turning them.

• If your child is on their stomach (called ‘tummy time’ in younger children), prop
their head, chest, abdomen and legs on pillows. Make sure the toes hang freely to
reduce any pressure on their toes (Picture 2). Do not leave your child alone while
they are lying in this position. This can also be done on a parent’s lap if your child
is very young.

• When your child is on their back, keep their heels off the bed or pillow by placing a pillow
under the cast near their calves. This helps avoid pressure and prevents sores.

• Protect your child from rolling or falling. Place chairs around the bed or couch. Surround your child with pillows.

• You may place an older child on a bean bag chair if they have good head control.
Beanbag chairs are not safe to use for infants or toddlers.

Picture 2  Make sure your child’s toes hang freely to reduce pressure on their toes.
Bathing

- Personal hygiene is very important. The cast holds in the heat and makes your child perspire.
- Wash the skin around the cast every day. Sponge bathe only until the cast is removed. DO NOT get the cast wet!

Lifting

- Do not lift your child by gripping only under the arms. This could cause muscle or tissue damage.
- Support your child's knees and hips when turning them.
- Do not lift your child by the bar between their legs, if present.
- Remember to keep your own back straight to keep from hurting yourself. When lifting your child, bend your knees and carry your child close to your body.

Toileting and diapering

Try to keep your child's head and chest higher than their feet. This helps urine and stool flow downward, away from the cast. You may need to put a small pillow or blanket under the crib mattress to keep your child's head raised.

Change your child's diaper as soon as it gets wet. Moisture makes the skin red and sore and leads to skin breakdown. To help reduce this, try these tips:

- **Double diaper** your child. Use a small diaper or maxi-pad and tuck it inside the cast in the front and back. Use a diaper one size larger than usual to secure around the cast and keep the smaller diaper in place (Picture 3).
- Check the diaper every 1 to 2 hours and change if needed.
- Use a diaper wipe inside the diaper area after every wet or soiled diaper. Let the skin dry.

Diarrhea
• If your child gets diarrhea, stop giving fruit juices for a few days. If the buttocks look red or sore, turn your child on their stomach and expose the buttocks to air. If diarrhea continues, call your child’s primary care provider.

• Use baby wipes often to clean your child’s bottom. If necessary, very carefully wash with mild soap. Do not get the cast wet.

If the cast gets wet

If the cast gets damp briefly use a blow dryer with a cool setting to dry it. Use the blow dryer for 5-10 minutes at a time off and on until the cast feels dry. Position your child so that the wet area of the cast is exposed to air. If the cast is saturated, please call the Orthopedic Office.

Odor

Odor can be a problem. A cast will not be replaced just because a cast is soiled or has a bad odor. If the cast gets soiled by urine or stool, use a baby wipe or damp washcloth to wipe off the cast as best you can (Picture 4).

Skin care

Check your child's skin every day. Keep the skin clean and dry.

• Check the skin around the edges of the cast 2 times a day. Look for any reddened areas. If there are reddened areas (other than the diaper area) and the skin is not broken, change your child's position more often. Red areas should go away within 30 to 60 minutes. If they do not go away, do not massage the area. Massaging could damage the skin. Red areas that stay red or pink longer than 60 minutes should be reported to your child’s provider.

• Red areas are a sign to turn your child more often. Keep your child off the red areas.

• Do circulation checks several times a day. Do not use lotions, oils or powders on the skin near the opening of the cast. These products can form balls that fall into the cast. This could cause a pressure sore. They also soften the skin. Soft skin is more likely to get sore.
Replacing the petals and tape on the cast

- Petaling the cast is done at the hospital. It protects your child's skin from the edges of the cast. "Petals" of moleskin or tape are cut to cover the edges of the cast. Regularly removing and replacing the tape and petals is NOT recommended. If you need to replace the tape or petals because they are soiled or falling off, your nurse will show you how to do this. You will be given extra supplies for the cast: moleskin, waterproof tape, and silk tape.

To replace petals on the cast:

Remove the pieces of soiled or loose tape or moleskin.

1. Cut strips of moleskin 2 to 4 inches wide and 4 to 6 inches long. The size will depend on the area to be covered. These strips are the "petals."
2. If needed, replace the silk tape directly on the cast first.
3. Remove the plastic backing from the moleskin and place the edge inside the cast next to the skin. Use your fingers to gently push the moleskin under the cast. (About 2 to 3 inches of moleskin should extend over the edge of the cast.)
4. Overlap the pieces. Be sure they are not wrinkled inside the cast. (Wrinkles next to the skin can cause sores.)
5. Bring the other part of the petal onto the outside of the cast. Continue this until you have repaired the area that was soiled or falling off (Picture 5).
6. Use longer pieces of silk tape to secure the petals down (Picture 5). This helps keep the edges of the petals in place.
7. In the diaper area, use waterproof tape petals on the cast (follow steps 1 to 7). Do not use moleskin in the diaper area.

Itching

Itching is a problem, especially in the summer. Do not put objects inside the cast. Sticks, hangers or back scratchers may break the skin and cause an infection. To help reduce itching:

- Knock on the cast over the area that itches.
- Use a hair dryer to blow air down into the cast. (Use the "cool" setting only.)
- Plan activities to take your child's mind off the itching.
• Keep your child out of direct sunlight. Sunlight makes them perspire and causes more itching.
• Use a fan on low setting off and on to keep your child cool.
• Do not pull the padding out of the cast.
• Benadryl®, a nonprescription medicine, may be recommended to relieve itching. Talk with your provider.

**Pain medicines**

• A child may have discomfort related to their injury or surgery. A provider will discuss use of acetaminophen, ibuprofen, and if needed, other pain medicines.

**Nutrition**

• Since your child is less active, their appetite may be reduced. Your child is healing, so they need a balanced diet (Picture 6). The cast covers the belly, so there is not much room for the stomach to expand. It is better to have your child eat **small meals more often, rather than 3 larger meals.**
• If your child is constipated, give them more to drink. Also give additional high fiber foods.
• Do not give foods that can easily cause choking such as peanuts, popcorn, hot dog chunks or grapes.
• If your child was old enough to feed themself before the cast was put on, let them keep on feeding themself. If possible, let them sit up in a chair. If they cannot sit on a chair, then prop up their head or place them on their side to eat (Picture 7). Place a pillow under the chest.
• During meals place a large T-shirt or towel over your child and the front of the cast to keep crumbs from falling into the cast.

**Picture 6** Give your child foods high in fiber and vitamin C.

**Picture 7** Encourage your child to feed themself.
Development and exercise

It is important for your child to be as interactive as possible. These things should be done every day:

- Have your child wiggle their toes and fingers.
- Have the child lie on their stomach to play, read or watch television. This helps strengthen the neck, back and arm muscles.

Being in a cast is upsetting for a child of any age. It requires many changes in a child's daily activities.

It is important to continue to treat your child, in most ways, as you would if they did not have the cast. Hold and cuddle your child. Give lots of love and affection (Picture 8).

- Expect the same behavior of your child as you would if they were was not in a cast.
- Include your child in activities and avoid keeping them apart from others.
- Keep items your child uses often, such as water and toys nearby. Remember your child is not independent now and needs help doing most things.

Transportation

- Due to the cast, your child will likely not be able to fit in their normal car seat. It is still necessary for them to be transported in a car with an appropriate car seat or safety device (E-Z On Vest).
- Before leaving the hospital, your child will be assessed to determine if they can still be safely transported in their car seat, or if an alternative is necessary.
- If an alternative car seat is recommended by our Passenger Safety specialist or other trained staff, it can be loaned to you while your child is in their cast. You will be shown how to use it.

When to call the Orthopedic Clinic:

Call your child's provider if any of these things occurs:

- Complaint of "burning" in a certain area covered by the cast or an increase in pain.
• Your child’s temperature is higher than 101 F by mouth, greater than 100.4 F by ear or more than 99 F axillary (taken in the armpit).

• New drainage or stain comes from the cast (yellow, brown, green, red).

• Foul odor comes from inside the cast (other than urine or stool odor).

• If your child is unusually irritable.

• Any breaks or cracks in the cast or if the cast appears loose.

• If anything gets down into the cast (such as a penny or toys).

• Repeated vomiting.

• Any open, broken, reddened or sore skin.

• If your child has more than one sign of poor circulation (such as cool feet, capillary refill greater than 3 to 4 seconds, bluish or dark pink toes, large amount of swelling, complaints of numbness or no feeling, little or no movement).

Follow-up appointments

• It is very important to keep your follow-up appointments. X-rays of the bones will be taken from time to time while your child is in the cast. Your provider will discuss when it is time for the cast to be removed.

• The cast will be removed at your Nationwide Children’s Hospital Orthopedic Clinic appointment.

• A cast saw is used (Picture 10). The blade vibrates back and forth. It does not spin around like other saws. It makes a loud noise and vibrates the cast as it cuts it. Sometimes the skin will feel warm from the vibration. The loud noise can make some children anxious and it may be helpful to bring headphones or a comfort item for distraction while the cast is being taken off.

If you have questions, please call Nationwide Children’s Hospital Orthopedic Clinic at (614) 722-5175.