Hip Spica Cast (A Guide for Patients)

Taking care of a child in a hip spica cast can be a difficult experience for you and your child. This information should help answer some of the questions you may have. Please write down any other questions you have and talk with your care team.

Your child will go home in a hip spica cast. This cast is put on by your doctor. It is often used after different types of hip or leg surgeries, tendon releases, or a broken bone. Both the cast and your child will need special care.

The cast may seem bulky and awkward, but it serves a very specific purpose. It immobilizes the hip(s) or broken bone to keep them in the right position. Follow the instructions given by your care team and in this booklet to:

- Keep your child comfortable and safe.
- Prevent sores caused by irritation and pressure of the cast against the skin.
- Check for cast tightness and circulatory changes caused by swelling or normal growth.

Your care team will give you:

- Follow-up appointment information
- A telephone number to call if you have questions or concerns

Teach other people caring for your child how to care for them and their cast.

Before Surgery

Work-up day

Your child will be seen in the Orthopedic Clinic sometime before their surgery. Routine procedures will be done to be sure your child is in good general health.

- A nurse will ask many questions about your child to get their medical history. They will take your child's temperature, pulse, blood pressure, and weight. They may collect blood and urine samples.
- X-rays may be ordered.
- If your child is sick, has an ear infection, a cold, or is running a fever, call the clinic before this visit. Surgery may need to be scheduled at later date.
- A blood transfusion is sometimes needed. If this is possible, your child will have a type and cross matched for blood. Your doctor will talk with you about this.
- The anesthesiologist (doctor who puts your child to sleep) will talk with you about the anesthesia used during surgery.
- Coughing, deep breathing, and clearing secretions from the lungs lowers the risk of pneumonia after surgery. If your child understands, they will be taught coughing and deep breathing exercises. They may be taught how to use a small breathing device also. This helps with coughing, deep breathing, and clearing the lungs.
- You will be taught how to help your child’s pain. Your care team wants you to take an active role in making sure your child's pain is minimal.

Night before surgery

You will be given chlorhexidine (CHG) cloths. This is a special soap to lower the number of germs found on skin. Use these the night before surgery, after your child's bath or shower. Tell your child's care team if they are allergic to CHG.

Your child may eat and drink until the time your care team gives you. Limit salty foods so they do not wake up thirsty.

Morning of surgery

Check in at the pre-op area at the time you are given. The nurse will:

- Take your child's temperature, pulse, respiratory rate, and blood pressure
- Put an identification band on your child
- Ask you some questions
- Answer your questions

Then, your child will go to the Presurgical Care Unit (PSCU). You may go with your child. You can stay with them until they go to the operating room.

While your child is in surgery, you can wait in the Pediatric Surgery Family Lounge on level 4 of Stead Family Children's Hospital. The doctors will talk with you here when the surgery is done.

After Surgery

The hip spica cast will is put on in the operating room while your child is still asleep.

Your child will go to the Post Anesthesia Care Unit (PACU). Recovery time depends on:

- How fast your child wakes up from anesthesia
- How much pain medicine they need in the recovery room.

You can be with your child in the recovery room when the nurse feels it is safe.

Your child will go to a hospital room when it is safe. Here your child will have a full assessment by the nurse. This includes:

- Taking your child's temperature, pulse, respiratory rate, and blood pressure
- Checking the intravenous (IV) site and line
- Checking the cast
- Checking for pain

A waterproof plastic tape will be put on your child's cast around the genital area. This helps prevent it from getting wet and dirty. The waterproof tape can be washed with soap and water.

The edges of the cast will be sealed with adhesive tape petals. This prevents the edges of the cast around the stomach from irritating the skin. It also limits plaster crumbs in the bed.

A colorful fiberglass cover is added to the cast before your child goes home. This offers one more layer of protection.

Things to expect:

- Your child will be lying on pillows in the hip spica cast. Smaller children will be propped sitting upright. This helps with optimal positioning to get the hips down into the cast.
- Your child will have an IV. It is started in the operating room. They have it until they drink adequate fluids and are eating. Talk with your child's nurse before giving them fluids and food. They will get clear liquids (ice chips, water, 7-UP®, or popsicles) first. Then, they slowly get more fluids and food.
- The nurses measures how much your child drinks and pees.
- Your child may have nausea or vomit. Medicines can be given to help.

- Your child may have pain or muscle spasms. The nurse will give pain medicine in the IV or by mouth. Pain medicine will be started as soon as possible. It will be given as often as needed. It is important that you, and your child if possible, tell your care team about pain. This will help your nurse better care for your child.
- The nurse will check your child's vital signs often. They will also check their toes for color, movement, sensation, and warmth. Toes should be warm and pink with good blood return.
- Your child may have some drainage through the cast. This is normal. The nurses will check it to be sure it does not increase.
- Your child may have edema (swelling) in the genitals. This is normal due some surgical incisions near the genital area. Use ice and elevate the site to help with swelling and pain.
- X-rays may be taken. This may be in PACU or after your child is in their hospital room.

Care of the Hip Spica Cast

Keep the cast clean and dry

Cast care and skin care are closely linked. If urine or bowel movements stays on skin, such as under a wet diaper or under the cast edges, diaper rash and skin breakdown are likely. This is painful for your child. It can slow healing if the cast must be removed due to skin problems. So, all precautions must be taken to prevent skin irritations.

Nurses will show you how to care for the cast. They will encourage you to help care for your child while in the hospital.

Use incontinence pads to protect the cast and skin if your child wears diapers. Place a pad across the diaper area. Tuck it under the front and back edges of the cast. Then, put on their diaper.

Every child's urinary and bowel routines are different. Children come in all sizes. No cast opening is the same. It changes based on the type of surgery done. So, you may need to try pads, newborn preemie diapers, folded cloth diapers, and incontinence pads until you find the right one.

Also, check the site at least every 2 hours during the day. Make sure the pad and diaper is changed as soon as it is wet or dirty. During the night, the pad and diaper should be checked and changed with each position change if needed. This should be done about every 3 hours. You may need to set an alarm clock to make sure this is not missed.

Remember: A cast can feel dry outside but is not always dry inside.

Position your child on pillows so their head and shoulders are higher than the buttocks. This also helps keep the cast dry. Protect the pillow with plastic wrap or a disposable diaper on the inside of a pillowcase.

Using a bedpan

Elevate your child's head and shoulders with pillows when they use a bedpan. This will help prevent urine from running inside the cast. Place a gauze or cloth pad or a small, folded towel on the back rim of the bedpan. This will absorb moisture and help keep the cast dry. Remove the pad with the bedpan. A plastic bedpan can be sent home with your child if needed.

Cleaning the cast

Clean the cast with a damp cloth and small amount of soap if it gets poop on it.

Drying the cast

If the cast is damp, expose it to air during the child's nap. Do this by taking off your child's diaper but leave the incontinence pad in place. Use a hair dryer on a warm or cool setting for 10 to 15 minutes. Do **not** use a hot setting. The hair dryer should be 10 to 12 inches from the site. It should not touch skin.

Bathing

Give your child a sponge bath each day. Do **not** get the cast wet. Use a damp cloth to reach under the cast edges to remove plaster and food pieces.

Do not use lotions, powders, or oils under the cast or around the edges. Powders can cake, and lotions and oils soften the skin. Both make skin break down easier.

Skin and cast inspection

Check under the cast edges in the morning and evening. Look for:

- Skin irritation
- Redness
- Blistering
- Open or draining sites
- Pressure spots

A flashlight may be helpful.

Look at the cast for:

- Cracks
- Dents
- Softening
- Tightness
- Looseness
- Drainage

Do **not** let your child poke crayons, small toys, or other objects under the cast edges. They may cause pressure areas and skin breakdown.

Eating and drinking

Do **not** give new fruit juices or foods. These can cause loose bowel movements. Have your child drink plenty of fluids. They should eat fruits and vegetables to prevent constipation and help healing.

Clothing

Use Velcro® on the legs of clothing to ease dressing.

Pain medicine at home

You will get a pain medicine prescription when you go home.

Positioning and Turning

Your child must be positioned well and turned often to prevent skin problems. This will also help their comfort. Their head and upper body should always be elevated. This helps with better positioning of the hips down in the cast. It also lets gravity pull urine and poop away from the cast.

Reposition your child on pillows at least every 2 to 4 hours, even at night. Turn your child from side to side, on their back, or on their stomach. Make sure the cast is not too tight at the waist or chest. Place a pillow or rolled towel under the ankle when your child:

- Is on their back so there is no pressure on their heels
- Is on their stomach so the toes do not touch the mattress

Sometimes, a wooden crossbar is placed between the legs. It is built into the cast with plaster when the cast is put on. The crossbar stabilizes the legs. **Do not** use the crossbar to turn your child. It may break off. When turning your child, have them keep their arms above their head.

If you see red sites near the base or top of the spine or on the heels, your child must stay on their stomach longer.

Transporting

Your child may be out of bed in a stroller or wagon if the cast size allows. Larger children may need a reclining wheelchair with elevated leg rests. Always use proper positioning and safety measures, such as side rails, seat belts, and safety straps. Your child's nurse will provide a car seat or vest restraint to use in your car. This will be loaned to you. You will need to return it to the clinic when your child is no longer in the cast.

Telephone Numbers

Call:

- The Orthopedic Clinic at **1-319-356-2223** from 8 a.m. to 5 p.m. Monday through Friday with nursing questions.
- The hospital operator at **1-319-356-1616** after 5 p.m., on weekends, and on holidays. Ask to talk with the orthopedic resident on call.

Helpful Hints

Below are suggestions from parents of children in hip spica casts:

Diapers:

- Use adult incontinence pads in the genital area. This also works for the abdomen if your child sweats. Good brand names are:
  - Dignity Pads®
  - Super Tranquility Pads®
  - Poise Pads by Depend®
- After wiping and drying buttocks, put a thin layer of Vaseline® or diaper rash ointment on child's bottom. This coats skin to prevent diaper rash.

Mobility and travel:

- Use a wagon with removable sides to move your child around the house. Prop them with pillows. Restrain them well.
- Travel with extra pillows to help position in restaurants and other places.
- Position your child in a recliner.
- Bean bag chairs are comfortable and work well for propping children for activities.
- Your child's care team can help you get a reclining wheelchair if needed.

Eating and drinking:

- Do not give your child fruit juices or foods that cause diarrhea.
- Do not start new foods.
- Give your child less fluids in evenings before bedtime.

Your care team can share other parents' phone numbers. You can talk with a parent who has cared for a child in a hip spica cast. Remember, be patient, you will get through this.