

Caring for Your Child or Teen in a Spica Cast

Day of Surgery

On the day of surgery, you will arrive at the preoperative department where your child will be checked in for surgery. Here you will meet with the surgeon and the rest of the surgery team.

- Once the surgery is done and your child is awake, you may either spend the night or go home that day.
- Nurses will teach you how to care for the cast before you leave.
- Caring for a spica cast takes a few supplies. Gillette will provide you with a bag of supplies to get you started, but this Starter-Kit will only last you a few days. While it is okay to have supplies ready at home, because the sizes may be different than your child needs once they are in the spica cast, we recommend waiting to buy your supplies until afterward.

Cast Care

A plaster or fiberglass spica cast is applied by the medical/cast team after surgery, but before your child wakes up. A plaster cast will not be completely dry for 24 to 48 hours. A plaster cast should not be signed, decorated or covered for at least one day after it's applied. A fiberglass cast will dry within one hour. Standing or walking in the cast is not allowed unless approved by your doctor.

Inspecting the Cast

Check your child's skin at least two times per day to make sure there is no irritation. Pressure sores, or areas of injured skin caused by staying in one position for too long, form most often on the heels and near the tailbone. Closely inspect the skin using the penlight from your kit at the edges of the cast, and look under the cast to check the skin underneath. If there are reddened areas, change the patient's position to remove the pressure from that area. If the area stays reddened for 30 minutes after the pressure is removed, a pressure sore may be developing. Keep the patient positioned so there is no pressure at all on this area. Report any pressure sores to the telehealth nurse line.

Use the penlight to check that there are no crumbs or small items such as small toys or coins inside the cast.

Fingers and toes should be pink. If the fingernail bed is pressed, it should turn white and then return to pink within 1 to 3 seconds when pressure is released. Fingers and toes should be warm to the touch, have no numbness, tingling or pain, and move as they did before the cast was applied.

Some swelling may occur around the cast. Keep the legs elevated above the heart. If swelling increases, call the telehealth nurse line.

Check the cast for change in odors. Report any foul or musty smell.

Check all edges around your cast. If you notice any rough edges, you can apply fleece or other petals to help reduce harsh areas. If this doesn't work, please call telehealth.

Keeping the Cast Clean and Dry

Protecting the cast from damage, dirt and moisture is difficult—especially when the patient is a young child. The cast must be kept as clean and dry as possible. Avoid sandboxes and try to keep foreign objects out as much as possible. If the cast gets wet, it may soften or crack and lose its proper position. If the skin remains wet, contact your telehealth nurse right away.

If your child develops diarrhea and soiling occurs under the cast, cast repairs may be needed to prevent skin breakdown.

Signs of Infection

Your child's incisions are covered by a cast. It is important to make sure the incision is not infected, so pay attention to the following signs as they may suggest an infection is present:

School-Aged or Adolescent Children: Drainage seeping through the cast; pain at the incision site under the cast; foul odor coming from the cast; or increase or decrease in warmth from under the cast.

Infant and Young Children: In addition to the above, young children may demonstrate signs of infection through altered eating, altered sleep, irritability or fever.

If your child is experiencing any of these, please call telehealth.

Bathing

While in a spica cast, your child will not be able to take a bath. Give a sponge bath instead, being careful not to get the cast wet. Use plastic wrap and towels to protect the cast. Wash all skin not covered by the cast. Clean the toes and skin near the cast edges with witch hazel, an astringent found in most drug stores. This will help toughen the skin and protect it from irritations. After a sponge bath, it is okay to use a blow dryer on their skin (on COOL setting only) to assist with drying. Do not use lotion or powder at cast edges because it might build-up, making the skin softer and causing more irritation. Exposed ankles, knees, elbows and heels may be rubbed with lotion if they become dry or irritated.

Cast Petaling

Because the edges of the cast are rough, the cast will be “petaled” before your child goes home from the hospital to prevent skin irritation. Petal-shaped waterproof tape strips are folded over the cast edges to make it smooth and comfortable.

To petal the cast, cut the waterproof tape into two-and-a-half-inch strips and round one end to prevent the tape from rolling. Tuck the square end inside the cast smoothly and bring the rounded edge over the cast outside. Overlap the strips and reinforce them when they wrinkle or loosen. You will be given waterproof tape in your Spica Starter-Kit so you can reinforce the loose petals at home. Do NOT remove any petals. If some petals start peeling or are soiled, simply trim away the tape and reinforce with more waterproof tape. If you have a plaster cast, the cast should not be petaled until it is completely dry.

Itching

If your child complains of severe itching underneath the cast, do not place anything into the cast. Objects may move

padding, or scratch or irritate the skin and lead to an infection. If itching persists, use a hairdryer, set on COOL only, to blow air down into the cast.

Positioning, Turning and Lifting

Wearing a spica cast can affect the person's breathing, appetite and eating habits, behavior, and bowel and bladder habits. It is very important that you move, turn and stimulate your child properly while in the cast. Be sure to protect your child from rolling or falling at all times.

Turn the patient every two to four hours during the day, and at least once at night to prevent pressure sores on the skin. Pillows, blankets or rolled-up towels placed under bony areas (knees, ankles, etc.) may be used for support and to prevent too much pressure on the skin. When turning the patient, support the ankle, knee and hip joints to avoid breaking the cast. The child may lie on the back, side or stomach, as long as the head is raised, and the cast is supported. It might be comfortable for your child to sit in a beanbag chair or reclining wheelchair/stroller. If there is a bar between the legs of the cast, do not use it as a handle to move your child.

The added weight of the cast (between 6 and 10 lbs.) and the inflexibility of the body in the cast make moving and turning patients a challenge. Do not pick up your child by their armpits but instead always lift them with one hand on the cast and the other around their trunk. Parents and caregivers must be careful to protect their backs. Bend your knees, keep your back straight, tighten your stomach muscles and let your legs do most of the lifting.

Pain and Discomfort

The amount and type of discomfort might be related more to the medical condition than the cast. Your doctor might order medicines to help relieve pain or muscle spasms. You should receive a separate educational handout about managing your child's pain at home.

Living in a Body Cast

Toileting/Diapers

Changing your child's diaper will be completely different once they are in a spica cast. It is important to know that the first several diaper changes may be difficult for both you and your child. Don't worry! You both will become more comfortable with the process as time goes on. Due to the importance of keeping the cast dry, you should check your child's diaper every 2 to 3 hours and change as soon as it becomes wet. Please reference the video link at the end of this handout for step-by-step instructions on how to change your child's diaper while in a spica cast.

The "defense team":

- The waterproof taped petals are your first line of defense in keeping your child's cast dry. Loose "petals" should be reinforced. Do not remove the petals from the cast.
- Padding your child's diaper with preemie diapers provides the second line of defense.
- Place an incontinence pad and small diaper (with tags removed) inside the spica cast to provide the third line of defense.
- Finally, cover the entire cast/private area with a larger diaper.

Remember: You will need extra supplies for toileting; the supplies provided you in your Spica Starter-Kit will only last 2-3 days.

Disposable diapers may be used for children who are not toilet trained. The diaper should be changed as soon as it becomes wet. Loose “petals” need to be changed and the cast padded with dry, disposable diapers as needed. You can make padding by cutting the diapers in half and taping the edges. Tuck the edges inside the cast, plastic side toward the cast and absorbent side next to the skin. Tape the outer edge to the cast. A sanitary napkin may be placed inside the diaper for extra absorbency.

Bedpan

When helping your child use a bedpan or urinal, keep their head propped up higher than the feet. Doing so will help drain urine and stool away from the cast. Prop their head up using pillows or folded blankets or by putting something under the crib mattress to raise the head of the bed.

When using a bedpan, place a disposable diaper around the edges of the cast, absorbent side out, the plastic side against the cast. Remove the diaper immediately after your child uses the bedpan.

A special type of bedpan, called a fracture bedpan, works best because it has a flattened end that can be placed under the buttocks.

Turn the patient to the side opposite the fractured or surgical side. Place the bedpan under the buttocks, and turn the patient back onto the bedpan. Check between the thighs to be sure the bedpan is positioned properly. Again, be sure the head is elevated so urine flows down and away from the cast.

Urinal

For boys, a urinal is used like a bedpan, but it is a bottle instead of a pan. The urinal is placed between the legs. Make sure that it is tilted so that the urine doesn't drain back out.

Constipation

Some people have problems with constipation while they are in a cast because of limited physical activity. It is important to have your child eat a high fiber diet and drink enough water every day. The following food suggestions are good sources of dietary fiber.

Cereals	Bran, Oatmeal, Shredded Wheat, Chex, Cheerios, Wheaties, Fiber One
Bread	Bran muffins, whole wheat, cracked wheat, rye oatmeal, 8 grain
Grains/Pasta	Whole wheat flour, barley, brown rice, rolled oats, wheat pasta, wild rice
Nuts/Legumes	Almonds, coconut, peanuts, peanut butter, popcorn, sunflower seeds, walnuts, black beans, kidney beans, lentils, navy beans, pinto beans, white beans

Fruits (fresh, dried, or canned)	Apples, berries, pears, nectarines, apricots, peaches, melon, grapes, citrus fruits, mango, papaya, plums, prunes, cherries, rhubarb, pineapple, kiwi
Juice*	Prune, peach, pear, citrus, papaya *Juices don't have fiber, but they have components that can aid in managing constipation. Limit fruit juice to 4-8 ounces per day.
Vegetables	Celery, potatoes, green beans, broccoli, parsnips, peas, sweet potatoes, carrots, corn, beets, cabbage, eggplant, onions, spinach, zucchini, asparagus, tomatoes, lettuce

Try to limit foods that cause constipation like chocolate, cheese, and bananas. If your child experiences loose stools, adjust the diet to limit high-fiber foods. Each child is different so adjust the diet as needed!

Nutrition

Make sure your child eats healthy, well-balanced meals while in the cast. Eating fresh fruits and vegetables, whole-grain bread and drinking plenty of water and juice will help prevent constipation or urinary tract infections. Eating small, frequent meals, instead of three regular meals a day, prevents the tight feeling that results from a full stomach.

Children should not drink more than three cups of milk a day while in a spica cast. Studies show that an excess of protein and calcium may cause calcium stones in people who are not active. However, drinking plenty of other fluids is a good way to prevent calcium stones. Cranberry juice is especially helpful. Before eating, place a large smock or shirt over the cast to prevent food and crumbs from falling into it.

Clothing

The cast is quite warm so you don't have to bundle the child too much. As much as possible, the child should be allowed to wear their familiar clothing. Skirts, dresses, large sweat pants or shorts are usually comfortable to wear. Even underwear a few sizes larger than the usual size can be worn over the cast.

Babies or very young children may be dressed in oversize sleepers. In cold weather, cover the toes with a large sock that fits over the foot of the cast. To wear pants or underwear when there is a bar between the legs, you will need to open each leg on the sides and sew Velcro on the seams. Or simply cover a child's lap with a small blanket.

Activities for Children in a Spica Cast

Infant – Age 3	Mobiles, hand-held toys, cloth balls to throw/catch, bubbles, puppets, music, mirrors, books and videos, play gyms, wagon rides
Age 4 - 6	Face painting, cars, action figures, felt boards, flashlights, keyboard piano, baggie painting (squish finger paints in Ziplock bags), Silly String, decorate casts, magnetic boards

Age 7 - 13	Beanbag toss, remote control cars, hand-held electronic games, easels for art/school projects, draw/color, create a scrapbook, Nerf basketball, make birdseed ornament to hang outside child's window
Age 13 +	Access to telephone to call friends, letter writing, friendship bracelets, crossword puzzles, diary, journal, scrapbook, videos, books, electronic games, computer, decorate cast, dry erase boards, calendar, ceramics, walkie talkie, invite friends to play.

Equipment and Transportation

- You may need to rent a wheelchair with a reclining back and extended leg rests while your child is in a spica cast. During the hospital stay, your nurse can direct you to someone at Gillette who will help with rentals. If your child is small, a stroller may be sufficient.
- Depending on your child's size and age, you may need to rent a hospital bed.
- You will receive a car seat from our Rehab Therapies department, specially fitted for your child. Car seats may need to be adapted (Gillette has car seats on loan). If your child must ride flat in the car, the E-Z-On-Vest is recommended. Return the E-Z-on-Vest or car seat when you return to Gillette for the cast removal, physical therapy and brace fittings.

Recommendations from Families

- [The Spica Life](#) website and the [International Hip Dysplasia](#) websites have great information and videos for parents.
- Some social media websites may offer support groups for families caring for a child in a spica cast.

Here are a few recommendations by other Gillette parents ([Gillette Children's Specialty Healthcare does not directly or indirectly endorse any of the products listed below.](#))

[Spica chair/table](#): These can come in all kinds of designs. They allow your child to sit up and be supported so they can play. Some even have a rocking feature. While these are nice to have, the price for something like this can vary greatly.

[Bean Bag](#): This will mold to your child when they are placed in it and can allow for a position change while keeping your child comfortable. It will be important to have ways to change your child's position frequently so they are not always putting pressure on the same spot on their body, as this can cause the breakdown of their skin.

[Wedge Pillows](#): Your child will need something to support their legs when they are lying down. A wedge pillow may be used to help support their legs and keep them comfortable. Other pillows you have around your home may also be used. The goal is to just provide support for their legs while they are sleeping on their back or side. A Boppy pillow may work as well.

Clothing: Your child will likely not fit into their regular clothing once they have a spica cast. Before you purchase too many additional items, wait to see how big the cast is. Coming the day of surgery with a larger shirt, dress or pants that stretch is a good idea. From here you will be able to judge what size clothing to get your child going forward. For eating, families found IKEA sleeved bibs helpful to keep food out of the cast. Onesie extenders and Velcro strips to adapt clothing have helped as well.

Diapering/Bath: Thicker wipes for bathing or diaper changes were suggested to help get areas extra clean. Some brand names that have worked better than others include Johnson and Johnson wipes, water wipes (bath), and Aquaphor diaper cream.

Getting Around the Home: Any strollers that can recline, pull behind wagons, or 4-1 trikes have been helpful for some families. For infants, some parents suggested the use of a Moby Wrap or Bebamour carrier for children who like to be held.

When to call your doctor or hospital

Call Telehealth Nursing (651-229-3890) if any of the following conditions are present:

- Severe pain, numbness or burning inside or below the cast (that not relieved with medication, elevation, or rest)
- Swelling or a cast tightness that is not relieved by elevation and rest
- A change in your child's toe temperature or color
- Increased difficulty moving fingers or toes on the cast side compared to the other side
- Unexplained fever above 101.5 Fahrenheit
- Toes that have slipped back into the cast
- A new stain on the cast, coming from the inside
- A foul odor coming from inside the cast.
- Broken, blistered or irritated skin around the cast edges
- A cracked, broken or loose cast that allows movement
- Cast becomes wet
- A foreign object inside the cast

Adapted from "Caring for a Child in a Hip Spica Cast," by Irene Kenny Murray, RN, MS, University Orthopaedics, Chicago, Illinois.

Please review the videos below for more information on spica cast care or visit GilletteChildrens.org/Spica

Make An Appointment [651-290-8707](tel:651-290-8707) Refer a Patient [651-325-2200](tel:651-325-2200)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](tel:651-229-3890).