

# Parent Handout for Spica Cast Home Care



## What is a spica cast?

The spica cast is a cast that covers the child's body from the nipple line to the full length of one or both legs. This cast will prevent leg movement while bone healing takes place. Complete bone healing takes six-10 weeks. It is important to follow the instructions you received in the hospital regarding cast care to prevent damage or changes in the cast so bone healing is complete and the bones heal properly.

## What type of spica cast does my child need?

There are several types of spica casts:

- Starts at the chest and goes down to one or both of your child's legs and toes
- Applied from the chest to the foot on one leg and to the knee of the other
- Covers the chest down to the thighs or knees

A rod may be placed between both legs to keep the hips and legs from moving. Your child's doctor will choose which type is best for your child.

Miller Children's Hospital Long Beach: Patient/Family Education Committee  
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## What are some signs I may see when my child is in a spica cast?

Your child may have any of the following symptoms, but not limited to:

- **Swelling:** Should not be present, but your child may have minimal swelling 1-2 days after the cast is first placed. When there is swelling, your child's cast may feel very tight, because there is not enough room inside it. Elevate your child's legs on a pillow or blanket. It is most important to prevent swelling in the initial days following the injury.
- **Compartment Syndrome:** Compartment Syndrome is a condition when the blood flow in your child's leg or thigh is blocked by swelling. He/she may have severe pain, weakness or numbness in the leg. A sign of Compartment Syndrome is the pain does not go away even after using pain medicine, raising the leg or putting ice on it. Notify the doctor immediately if your child has extreme pain that is not relieved.
- **Infection:** Your child may get an infection if the spica cast is not kept clean. He/she may also get an infection if wounds and sores are not cared for correctly. Symptoms may include pain, redness, swelling and/or fever.
- **Joint Stiffness:** Your child's joints may become stiff and he/she may have trouble moving after being kept still for a long time. Your health care provider may help your child with exercises to improve his/her movement. Your child may have a limp when the cast is removed.
- **Muscle Atrophy:** This is a condition where your child's muscles get smaller after not being used for a long time. Ask your health care provider about ways to strengthen and increase the size of your child's muscles.
- **Skin Sores:** Your child may have blisters, sores or wounds if the spica cast is too tight. He/she may also have wounds if the skin under the cast is scratched, or if he/she stays in one position for too long. Check your child's cast daily for proper fitting. If the cast is too tight, notify your doctor immediately.



## Why are blood circulation and movement checks needed?

You will need to check the blood circulation and movement of the toes below the cast to make sure the blood vessels and nerves are working correctly. A tight fitting cast may cause decreased blood flow to the legs. Circulation checks should be done every one - two hours for the first 24 hours and then daily after 24 hours. You will need to check for:

1. **Movement:** your child should be able to wiggle his/her toes. He/she should be able to move all toes easily.
2. **Sensation (feeling):** your child should be able to feel you touch his/her toes. If your child has numbness or tingling, notify the doctor.
3. **Color and warmth:** both feet should be equally warm, not cold, and toes should be pink, not blue or pale.
4. **Blood return:** this is to check blood flow to the toes. With your fingers, place light pressure on the nail bed and quickly release. Pink nail bed color should return in two - three seconds after pressure is released.
5. **Swelling:** should not be present but may be minimal one - two days after the cast is first placed. Notify the doctor of any problems after circulation checks.



## Does nutrition affect healing?

1. A well-balanced diet helps the body heal. It may also prevent urinary tract infections and constipation.
2. A well-balanced diet includes protein and calcium rich food. Some protein rich foods are meat, poultry, fish, eggs, beans and dairy products. Your child should consume at least 2 servings of calcium rich foods each day. Some examples of these foods are milk, yogurt, cheese, bok choy and fortified orange juice.
3. Increasing fiber gradually may help with constipation due to decreased activity. Whole grains, fruits and vegetables are high in fiber.
4. It is important to drink plenty of fluids. This decreases problems with urinary tract infections, kidney stone formation and constipation. Your child should drink a minimum of \_\_\_\_ ounces per day. Give your child water and up to 8 oz of 100 percent fruit juice. Remember that too much apple, pear or prune juice may cause diarrhea.
5. The cast may feel tight around the stomach after big meals. Feed your child small meals often to help them feel more comfortable.
6. Put a large towel or shirt on your child to prevent food from falling into their cast while eating.



## What should I consider when my child has to go to the bathroom?

1. Your child should have a normal bowel movement at least every two days. Do not wait more than two days to notify your doctor of constipation.
2. Signs of constipation include abdominal fullness, hard, ball-like stools or complaints of stomach aches.
3. Increasing fiber and fluids decreases problems with constipation.
4. Your child may also need an over the counter medicine called a stool softener to help move the bowels.
5. If your child wears diapers, use a smaller size than you normally would and use only disposable diapers. Cut the adhesive tabs off the diaper so that they won't irritate your child's skin and tuck the diaper under the cast beginning at the child's rear and moving toward the front. The plastic side of the diaper should face the cast; the absorbent side should be next to your child's skin. Change the diaper as soon as possible after your child urinates or has a bowel movement. At night, add an extra smaller diaper, sanitary napkin or adult incontinence pad inside the diaper.
6. If you can lift your potty-trained child, help him or her to use the toilet.
7. Use a bedpan or urinal for a bigger child who cannot get onto the toilet.
8. It is important to wipe girls from front to back, and cleanse any child well after bowel movements.
9. Emptying the bladder completely is important to prevent urinary tract infections. Notify the doctor of any of these signs:
  - Pain or burning during urination
  - Cloudy urine
  - Low back or side pain
  - Abdominal fullness
  - Chills
  - Vomiting

## How do I protect the cast and keep it clean and dry?

1. Daily skin inspection is important to detect problems early and keep your child comfortable.
2. Foreign objects, such as toys and crumbs under the cast may cause irritation or infection.
3. A towel placed over the child's chest during meals or snacks can prevent food from getting under the cast.
4. Do not give young children small toys that could be put in the cast.
5. Don't stick objects under the cast. This can cause damage to both the skin and the cast material.
6. A blow dryer set on a cool setting may be used to relieve itching.
7. If your child develops a groin rash, leave the area open to air. Dry the groin with a blow dryer on a cool setting to decrease discomfort.
8. It is important to massage the bony areas (back of head, shoulders, tailbone and heels) to increase circulation and promote comfort each time the child is turned and as needed.
9. Do not use lotions or powders under the cast edges, as these may cake with skin oils and perspiration and cause skin breakdown. Notify your doctor if this occurs.
10. The cast may be cleaned with a damp cloth and left uncovered to dry.
11. Clean off heavily soiled areas of the cast to reduce odors. You can use a damp cloth, with or without cleanser, to wipe dirty areas on the spica cast.

## How do I care for the edges of the hip spica cast?

You may fix the cast edges to keep them smooth. This prevents your child from scraping against any rough edges of openings on the cast. You may do the following:

1. Cut pieces of waterproof tape about four inches long.
2. Place one end of the tape under the inside edge of the cast and wrap it onto the cast's outside surface.
3. Overlap the tape strips until the edges of an opening on the cast are completely covered.
4. Cover the genital or diaper area opening completely. Your child may have skin problems, and the cast may smell badly if this area is not completely waterproofed with tape.
5. Do not pull or rearrange any of the padding inside the cast. This could cause blisters and wounds to your child.

## How do I position my child safely?

1. Avoid forward flexed positions. Your child should not be bending over the top of cast. Also, avoid positioning on the stomach or on the operative side of the hip reconstruction.
2. Your child will need to be repositioned every two - four hours. Regular movement helps to relieve pressure areas under the cast to help prevent irritation and sores from developing. Occasionally, put your child in a semi-sitting position by propping his or her head on pillows, with a beanbag chair or a recliner chair.
3. Do not turn your child using the bar between his/her legs as a handle as it is fragile and needed for support of the cast.
4. Supporting the cast with pillows prevents flattening or cracking of the cast. Notify the doctor of any cracks, breaks or softening.
5. Make sure your child's heels are off the bed to prevent pressure sores.
6. Placing a pillow underneath your child's head or shoulders may thrust the chest forward and cause discomfort or breathing difficulty. Position your child for comfort. Listen to your child's comments. Your child should be able to take a deep breath and crying infants shouldn't have difficulty breathing. You should be able to insert one finger inside the top edge of the cast.
7. Sit your child up for eating. This is more comfortable and decreases the chance of choking. Some infants may fit in soft-sided strollers or be held on the caretaker's legs.
8. A pillowcase or baby blanket serves well as a groin cover for the child in a spica cast.
9. When repositioning your child, use the palms of your hands, as pressure from fingers may cause indentations when the cast is damp.

## What can my child do while in a spica cast?

For any child, being restricted in a cast is frustrating. Treat your child as a normal family member. He/she is not ill and can participate in some family activities. Activities may need to be revised, but should continue.

Regression is normal after hospitalization. Parents need to provide opportunities for their child to play or talk about the hospital experience. Child Life Specialists can help you find activities to redirect your child's frustrations and identify other activities to help relieve boredom. Changing your child's position frequently, taking them out of the room for a change of environment, going to the playroom, providing movies and games or visits from family and friends may help. Providing activities that encourage deep breathing and lung expansion such as blowing bubbles may help prevent breathing problems.

## **When to call the doctor or the clinic:**

- Toes or fingers have numbness, swelling or unusual color changes
- Fever not associated with any other illness
- Pain under the cast
- The cast is either too loose or too tight
- Foul odor coming from the cast
- Drainage comes through the cast
- There is an open sore around the edge of the cast
- Constipation not relieved by an over the counter stool softener medication
- Foreign object falls inside the cast and you cannot get it out
- Skin breakdown
- Cast breakdown
- Constant, inconsolable crying

## **Cast removal tips before you go to the orthopedic clinic**

1. Pre-medicate your child for stiff joints with over the counter medications (i.e. Tylenol® or Motrin®)
2. Bring clothes for child to wear after cast removal

## **Parents can call the orthopedic clinic at (562) 933-0249 for questions on the spica cast care.**

### **References:**

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