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Spica casts are commonly used in children with MPS and related disease after hip surgery. They often require a significant amount of effort and planning. Fortunately, they are usually only used for 6-12 weeks after surgery.

What activities will my child be able to participate in

Ask your surgeon what limits your child will have in regards to crawling, rolling, sitting, walking, or using a walker or crutches. Before going home, make plans to get a semi reclining wheelchair with elevated leg rests. Other things you may need are crutches, a portable bedside trapeze, and a metal bedpan. Whenever possible, take your child on outings. Try games and activities that involve arm movement. A beanbag chair may be something to consider.

Decorating the cast

Feel free to decorate the cast with colored pens or decorative glue. Avoid oil paints and spray paints, which can get through the cast and cause serious skin problems. Avoid lots of stickers or other decorations; there must be room for the cast to breathe.

Keeping a spica cast clean and dry

Keeping your child's cast dry is the most important step in avoiding complications with a spica cast and to keeping the cast from becoming very stinky! A wet cast should be dried only with a blow dryer on "cool" settings. Casts that are overwhelmingly wet should be removed by an appropriate health care professional. If you find urine stains on the cast, you can remove the odor and stain by mixing equal parts of white vinegar and water. Soak a cloth in this and place it on the cast stains, allowing to sit for a minute or two, than remove the cloth and let the cast air dry or use a hair dryer set on the cool setting only (do not use heat). While the cast is still damp, rub in a little baby powder — it will make the cast smell better. Oil of clove also may be applied to the cast (*not* to the skin) to mask the odor. Any soiled area on the cast can be washed in the same manner as above, without the vinegar.

Diaper care

Two diapers are typically used when a child is in a spica cast. An inner diaper that absorbs stool and urine and an outer diaper, which wraps around the outside of the cast. When changing a diaper, tuck the front of the inner diaper into the front opening of the cast. Then turn your child over onto her stomach and tuck in the back. This makes for a nice, tight fit. Change these diapers at least every two hours. Check often in order to keep the cast from getting wet and soiled. A good outside-of-the-cast diaper is a larger sized diaper or a cloth diaper fastened with pins. Disposable diapers are the easiest diapers to put into the cast, and are the most absorbent. Occasionally, your child may soak through the diapers, and soil the cast. A good way to absorb the wetness in the cast is to use a cloth diaper. If there is sufficient room, push the diaper into the bottom opening of the cast and pull it up under the cast to the top edge. Allow it to soak up the urine and then remove. Diaper liners may be helpful if your child wets (pees) a lot at a time.

Sharp Edges

The edges of the spica cast, particularly in the groin area, can become rough over time and irritate the skin. “Mole skin” padding can be placed around the edges when the cast padding is not enough. Mole skin can be purchased at your local pharmacy. Female sanitary napkins are also useful to fold over the cast edge. These not only provide additional padding, but they are also absorbent and can be changed as needed.

Moving and lifting your child

Before you go home, ask the nurses to show you how to turn and position your child. Change your child’s position every three to four hours during the day. If your child is able to assist in position changes, you may want to rent a portable trapeze for over the bed.

Clothing

Clothes can be worn over casts (tube socks for toes; shorts or overalls cut up the inside or outside seams, with Velcro strips sewn on for closure). Large T-shirts or sweatshirts will help keep crumbs out of casts.

Bathing

Give your child a sponge bath every day. Wash skin at cast edges using a little soap, and dry well. Make sure to not allow the cast to become wet. Check the skin for any sores. A flashlight to look inside the cast, especially at the tailbone, is very helpful. If an incision is present, ask how to care for it. Incisions under the cast usually do not require care.

Meals

At first, your child may complain of a stomachache or of not being able to breathe easily. These symptoms usually disappear within a few days. *Call your doctor if they continue.* Try giving smaller meals more often. A good diet is the best way to prevent constipation (often a problem when a child is in a cast or with certain pain medicines). Give your child lots of fresh fruits, vegetables, whole grain cereals and breads, and plenty of fluids.

Going to the bathroom

A metal bedpan is very useful for older children. These are available through a medical Supplier. Provide a private place for your child to use it. Lining the bedpan with plastic wrap or covering it with a plastic bag before use makes clean-up easier. Stool softeners (available without a prescription, at your local pharmacy) help with the constipating effects of being inactive and taking pain medicine. If your child does not have a bowel movement in three days, call your doctor’s office about a laxative. We have found that sugar-free or diet Gummie Bears containing sorbitol act like a laxative for children.

Sleep

Sleep is often difficult because the decreased activity and time spent in the hospital may have changed your child’s usual sleep patterns. Your child may find it easier to sleep on one side or the other, or on her front, using pillows for positioning. Try different positions to see what works best for your child

Itching

Itch is usually caused by moisture on the skin or a healing wound. This can be helped with the use of a hair dryer on a *cool (never use heat)* setting. Benadryl can help reduce itching and is available over the counter without a prescription. A fiberglass cast allows for air penetration over the areas that may itch or be wet. Do not use any objects for scratching under the cast (coat hangers, knitting needles, etc.) Instead, use a game or activity to distract your child until the itching stops.

Leaving Your Child Unattended

Arrange for a signal, such as a bell or whistle, so that your child can call you at night, or when you are not at their bedside. Older children may feel more secure with a telephone nearby. If you must leave home, make arrangements for someone to stay with your child.

Transporting my child

Transporting your child in a spica cast will take extra planning. When possible, your child's cast may be formed to fit into their own car seat. If there is no bend in the cast, it may be impossible to fit your child in a standard car seat. A special car seat or harness may be needed. In some cases, even special restraints won't work and professional transportation, such as an ambulance, may be necessary. Your child should never travel in a vehicle seat that is reclined. When the seat is reclined, the seat belt will not contact your child's body properly. Never transport your child without appropriate safety harness in place. This could result in serious injury. You should never transport your child in the back of a truck. Airplane travel is possible but you may need to buy more than one seat. Ask about your options before you leave the hospital.

Removing the cast

Children tend to feel secure with their casts. Losing this security, along with the noisy sound of the cast saw and the look of the cast room can be a bit scary. You may consider giving your child Tylenol (or his prescribed pain medicine) one hour before the cast removal. You may spend time at home with your child, pretending to remove the cast with a vacuum that has a hose attachment. Refer to the cast saw as a vacuum instead of a saw. After several weeks in a cast, your child's joints may be stiff and difficult to move. This will slowly improve. Warm baths will decrease the discomfort and help your child regain range of motion. The first week or two out of the cast can be a tough time for the child and family. Please ask your medical professional for specific information pertaining to your child's activity limits. Depending upon the type of surgery and the diagnosis, it may take up to a month before there is good movement of the involved joints and limbs.

When should I call the doctor?

Please call the doctor if your child has:

- Numbness or tingling in toes
- Swelling of the toes
- A broken or cracked cast
- Unusual complaints of pain
- Fever while recovering from surgery

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