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# **Hip Spica Body Cast**

## **Introduction To The Hip Spica Body Cast**



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## **Introduction To The Hip Spica Body Cast**

A hip spica body cast has been put on your child to hold his/her legs in a certain position. This allows the bones to heal.

The first week in a body cast can be a tough time for you and your child. Most children want to be able to move freely. Your child may cry and fuss till he/she gets used to the cast. This can be hard on you and your family. However, with lots of cuddling and play, almost all children adjust to their life in a cast.

### **The Information In This Booklet Will Help You With The Following:**

#### **Cast Care:**

How to keep the cast clean, dry and in good condition (no broken edges, cracks, etc.).

#### **Skin Care:**

How to prevent skin rashes, bruises or sores from developing under or around the cast. How to check for circulation, warmth, movement and sensation.

#### **Day-to-Day Care:**

How to help your child stay as active, stimulated and comfortable as possible.

#### **Other Resources/Hints:**

It is best to be as prepared as possible. Read through this pamphlet several times and ask questions. Look at the cast and traction book on the ward. There are some other resources listed at the end of this booklet.

## How do I care for my child's cast?



Your child's cast is made from either a white plaster or a fiberglass material with cotton padding, or fiberglass with waterproof lining. Check the one that your child has below:

### **My Child Has A:**

plaster cast \_\_\_\_\_

or:

fiberglass cast \_\_\_\_\_

and

waterproof lining \_\_\_\_\_

While the cast dries, rest the cast on something soft like a soft pillow. A hard edge may dent or crack the cast. The dent or crack can rub against your child's skin and cause pain. A plaster cast takes about 36 hours to dry; fiberglass takes about 20 minutes.

## **Cotton Padding (not waterproof)**

When the cast is dry, the edges are covered and overlapped with waterproof tape to keep the edges smooth. This process is called “petalling”. A rough edge makes the skin sore. If your child has had a surgical incision, it is best to do the petalling as soon as possible as swelling may occur, making it difficult to petal the groin area.

## **You Can “Petal” The Edge Of Your Child’s Cast Yourself. Here Is How To Do It:**

1. Cut 3-inch strips or use ready prepared “petals.” Lay these down side by side, overlapping slightly; fold them over the edges of the cast. These make a smooth edge to the cast.
2. Tape as far in as possible on the inside of the cast. Smooth the tape out to remove any wrinkles, (wrinkles can cause rough spots that rub and damage your child’s skin). If your child’s skin is very sensitive, there are other types of tape that you can use. Talk to the Orthopedic Nurse or cast technologist about this. Sometimes, a GORETEX™ waterproof lining may be used. Try to avoid removing the tape, as padding under the cast comes off with it.

Try to keep your child’s cast clean and dry. Moisture under and around the cast is an ideal place for germs to grow if the cast is not waterproof. This causes the cast to become smelly. You can use a hair dryer on a cool setting to dry the wet areas thoroughly. But take care, as even a hair dryer on a cool setting may burn the skin.

## **GORETEX™ ( Pro-Cel) Waterproof Lining**

[http://www.gore.com/en\\_xx/products/consumer/procel/index.html](http://www.gore.com/en_xx/products/consumer/procel/index.html)

These are specific instructions about the waterproof lining.

1. **DO NOT petal the edges** of the cast with waterproof tape.
2. If your doctor approves, your child may bathe regularly or wash the cast.
3. Your child may flush with mild soap and water, followed by a thorough rinsing with clean water.
4. Attempt to drain the cast of water by different positions and gravity, to help the drying by air.
5. Plan your outings according to how long it takes to feel dry.
6. If the lining moves, leaving a sharp edge in contact with any skin, call your orthopaedic doctor or orthopaedic clinic nurse to set up appointment as soon as possible.
7. The diaper area saran wrap roll technique around the inner thighs and buttocks is still recommended for any child still wearing diapers. Without these rolls, urine will seep underneath the cast and cause the skin to break down. See skin care section.

## **Are There Are Any Warning Signs That I Should Look Out For?**

While you are caring for your child's cast and skin, there are things that you need to watch out for. Call the Orthopedic clinic nurse or doctor at once if any of the following occurs:

- Your child's toes swell, feel chilly or look pale and bluish, rather than healthy pink.
- Your child is not able to wiggle toes.
- Sores or red rough patches on the skin under or around the cast.
- There is a strange smell from the cast.

- Your child has a pain that won't go away in an area under the cast.
- The cast breaks or cracks.
- Your child pushes something under the cast that you can't remove.
- Your child is feverish or unusually cranky.
- You are, for any reason, concerned that all is not well.
- The cast seems very tight in any area.
- There are sharp edges on the cast.

## **How Do I Care For The Skin Under My Child's Cast?**

Keep your child's skin as clean and dry as possible. Make sure that your child does not pull out the lining or stick anything inside the cast.

Give your child a sponge bath every day. Wash the skin that is uncovered and easy to get to. Dry your child's skin well. Do not use talcum powder, as this tends to cake and collect under the cast. Use this time to check your child's skin everyday.

Check along and under the cast edges each day for redness or chafing (where the skin is sore or damaged) caused by the cast rubbing against the skin. If you see signs of this, massage the area gently with your fingers. Check your child's heels, bum and shoulders for redness. Place a small pad under the cast at his ankles so his heels are up off the bed when your child lies on his back. Massage the heels each day. Rubbing alcohol can be rubbed on your child's skin to help toughen it.

Itchiness under the cast is a common problem. Never poke anything under the cast to try to scratch the itch. Try to relieve the itch by blowing cool air from a hair dryer under the cast. If this does not help, please call the clinic nurse. Do not allow your child to stick anything down the inside of the cast.

Change your child's position often to keep pressure off one area of skin for too long. Your child's position should be changed every 2 – 4 hours, and at least once every night as well.

## **How Can I Help My Child Use The Toilet?**

Working out a good way to toilet your child will also help you with the skin and cast care. It is not possible for your child to use a toilet while in a hip cast. You will need a bedpan, and for a boy, a bottle. He can use any wide-mouthed bottle. You can borrow a bedpan from your local Red Cross or purchase one from a medical supply store (see the telephone directory or yellow pages).

### **To Place Your Child On A Bedpan:**

1. Place a plastic sheet or a heavy towel underneath your child.
2. Roll your child onto his/her side.
3. Tuck about a 12-inch length of plastic wrap under the cast to surround your child's buttocks.
4. Set the loose end of the plastic wrap into the pan to create a "runway" for urine and stools (girls may require a second piece of plastic wrap tucked into the front opening of the cast).
5. Prop up the child's head and trunk on pillows.
6. When your child is finished, pull the plastic wrap out and discard.
7. Clean your child's genitals and bottom with a damp cloth.
8. Dry well.

Ask a nurse to show you how to place your child on a bedpan before you try it.

## **How Do I Change My Child's Diaper?**

The goal is to keep the padding under the cast as clean and dry as possible. The padding will get wet and smelly if urine (pee) or feces (poop) soil it. A nurse will show you how to diaper in a way that will protect the cast. Check the diaper every 2-3 hours and change it if it is wet or dirty.

### **To Change Your Child's Diaper, You Will Need:**

- a clean diaper
- plastic wrap
- scissors
- J-cloths or pieces of soft cloth rolled into 8 or 9 inch "sausages"( have a bunch of these pre-made)

### **To Change Your Child's Diaper:**

1. Lie your child on his/her back.
2. Tuck the cloth/plastic wrapped "sausage roll" into the cast edges around the groin leaving a plastic wrap overlap which is then taped into place above the petalling tape if used. Duct tape works well.
3. This will create a seal between skin and cast. Ensure the rolls are a snug fit.
4. Repeat this for the back side as well; turn your child on their side or tummy and place sausage roll inside with an overlap of plastic wrap taped into place.
5. Place a smaller diaper or maternity pad in the perineal area and then diaper as usual using a larger diaper to hold this smaller one in place.
6. Change the diapers and rolls more often to prevent soiling of the cast.

Tip: To absorb large amounts of urine, put a maternity pad or an incontinence pad (such as Poise™) inside the diaper.

If you are having trouble with keeping the cast dry in the diaper area, please call the Orthopedic Clinic Nurse for other suggestions.

## **How Can I Help My Child Cope?**

The first few days are unsettling and may take some time for everyone to adjust. Your child probably needs more loving hugs and cuddles than usual. The bulky cast makes this challenging but you really comfort your child when you find ways to have close contact.



### ***Being Part Of The Family:***

Your child may be happier together with you and the rest of the family. A suitable chair helps you to include your child in family activities. There are several ways for your child to play sitting up:

- A Humpy chair may help if your older child has casts on both legs. You might want to borrow or make one. There is a pattern available at Children's hospital, (ask the Orthopedic clinic nurse about it).
- Beanbag chairs are good for propping your child up.
- An outdoor lawn chair can be used as it is easy to move from one room to another.

### ***Looking After You:***

Caring for a child in a body cast can be tiring. You will need rest and time out. Show a willing family member or a reliable babysitter how to care for your child and then use every opportunity to give yourself a break. You can do a better parenting job if you allow yourself some rest and

relaxation. Make sure to use good body mechanics when you lift your child. Ask the Orthopedic Nurse to show you proper lifting techniques so you do not injure yourself.

## **What Do I Need To Know About My Child's Diet?**

Your child can get constipated due to the fact that he is not moving around as much. You can help this by making some changes to your child's diet:

- Offer foods that are high in fibre such as fresh fruits and vegetables.
- Offer whole grain foods such as whole wheat bread and pasta.
- Offer smaller meals more frequently.

If your child is older, it may be easier for your child to eat in a different position. Your child could try eating from a side lying position, propped up, or even laying on his/her tummy while eating.

## **How Do I Dress My Child In A Hip Spica Cast?**

You can adapt pants, shorts and underwear by splitting the side seams and adding Velcro™ strips to fasten the sides. You may need to make an "insert" with some extra material for pants so that they fit around the cast.

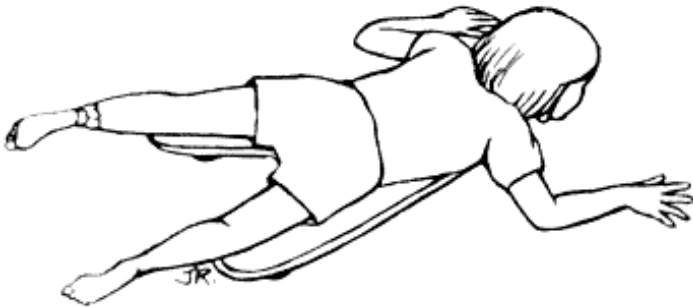
Tear away pants work well. For girls, dresses are perfect. You may need to buy clothes in a larger size to fit the cast. Because this is for the short term, you may want to look for some clothes in a thrift shop until the cast comes off. It is recommended that infants and young children wear a bib or t-shirt to avoid food or toys falling into the cast at the top.

## Can My Child Go To School?

Children in hip casts may be unable to attend school. The school principal or counsellor can help you to arrange for home tutoring.

## How Will My Child Move Around?

Being stuck in one place is very hard on young children who are already used to running and jumping. Preschoolers who are working at independence typically want to do everything themselves. The cast gets in the way of growing up. It makes them depend on you. Being able to move about on their own can be very important to some. Many will struggle to find a way to get about and manage! This is fine, as long as it is not damaging the cast and it is safe to do so.



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Your child may 'scoot' along the floor (use his/arms and body to move along the floor). You can also help your child get around using a scooter board. A pattern is available. If you have an active young child who will need a cast for a long time, a scooter board can be the answer. Make sure that you provide a safe place for your child to use a scooter board.

Some older children in hip casts may be allowed up on crutches. If your doctor has suggested this, be sure your child knows how to use them safely. Ask for an instruction pamphlet ([www.bcchildrens.ca/KidsTeensFam/FamilyResourceLibrary](http://www.bcchildrens.ca/KidsTeensFam/FamilyResourceLibrary)). A physiotherapist can show your child how to use crutches safely. Remind your child that she must not put weight on that leg until you know it is safe to do so. Your child's doctor will let you know.

Playing is your young child's major job. It is the basis for learning. A child without play is a bored and unhappy child. With some imagination you can help your child come up with suitable play activities while in the cast. Try quiet activities such as playing board games or having friends over to visit. Ask the Child Life Specialists in the hospital for suggestions. If you run out of ideas, try your public library for books such as, "What to do when there's nothing to do", by Elizabeth Gregg.

## **How Do I Make Our Home Safe For My Child?**

- Use safety gates in places where it might be dangerous for your child (in front of stairs).
- Always use safety belts on strollers, highchairs, wheelchairs or in vehicles.
- Always keep the side rails up on your child's crib.

In case of emergency, your child must be in the care of someone who can safely carry him/her out of the home.

## **How Do I Fasten My Child Safely In A Vehicle?**

It is best to think and plan ahead as to how you will transport your child and knowing exactly what type of hip spica cast will be applied will help with your planning. You can talk to your child's therapist or orthopedic clinic nurse to find out the best way to fasten your child in a car safely. It is recommended that your child use a seat belt

and/or appropriate child seat or restraint system. Safe transportation is possible with different equipment which is listed below. Your choice will depend on the age and weight of your child. The manufacturers' guidelines and availability which can be limited.

It is essential to work with your child's occupational or physical therapist and orthopedic nurse in determining which option would be most appropriate in meeting your child's transportation needs. All of the options have limitations so travel should be limited. The goal is to determine which method would provide the greatest level of safety when transporting your child with a hip spica cast.

It will be helpful to have the measurement of the width of your child's cast at the widest part if you need to buy a car seat.

### **Rear Facing Car Seats**

First, check to see if your own rear facing car seat will work. If not, here are some other car seat systems that you can investigate:

1. Car seats available at retail stores may fit depending on the amount of hip abduction and flexion. It is best to go to the store once you "visualize" or measure whether your own car seat will or won't work. Some parents have successfully used the Evenflo Triumph™ or Britax Marathon™ car seats. See the resource list at the end of this booklet.
2. The Spelcast™ Child Restraint is a specialized convertible car seat. It can be used in the rear-facing position for babies who weigh less than 20 lbs and are less than 26 inches tall. See the resource list at the end of this booklet.
3. The Britax Hippo is now available for use in Canada. See the resource list.

## **Forward Facing Car Seats**

First, check to see if your own forward facing car seat will work. Other forward-facing child car seats/restraints that may work include:

1. Car seats available at retail stores may fit depending on the amount of hip abduction and flexion. The Graco Comfort Sport Convertible™ or other forward-facing car seats may work.
2. The Spelcast™ Child Restraint is a specialized convertible car seat. It can be used in the forward-facing position for children who weigh 20-40 lbs. and are less than 40 inches tall. See Resource List
3. The Gorilla™ is a specialized car seat for children weighing 20—105 lbs. See the resource list at the end of this booklet.
4. The E-Z-On Vest™ is a specialized harness/vest restraint that can be used when sitting. See the resource list at the end of this booklet.
5. The Britax Hippo is now available for use in Canada. See the Resource List.

## **For Children In Wheelchairs**

For children who used a wheelchair for transport prior to the hip spica, they may continue to use the wheelchair, however modifications may need to occur to accommodate the cast. Talk to the orthopedic clinic nurse or your seating therapist about this.

## **All Other Children**

If it is difficult to locate an appropriate and safe child restraint system in the sitting position, other options will need to be considered. The following options are recommended for children in a body cast which have no bending at the hips:

1. Ambulance transfer may be recommended by your doctor/nurse. You can book an ambulance transfer for appointments yourself by calling the non-emergency number for the lower mainland at 604-872-5456. Please inquire as to the cost.
2. The E-Z On Modified vest™ is for lying flat. It comes in several sizes depending on the child's age, weight, size and chest size with the cast on. Please ask the Orthopedic Clinic nurse where these are available. See the resource list.

## **Follow-up Visits**

Your doctor will discuss the plan for follow-up visits and estimate how long the cast will be on. Occasionally, the cast may need to be changed. When it is time, the cast will be removed in the clinic with a specially designed vibrating saw that does not cut skin. Your child will have an X-ray before the cast is taken off. Once the cast is off, the skin may be dry and flaky; use some skin lotion and add bath oil to the bath.

The limbs may look thinner but in a few weeks, with exercise, they will return to normal size. After a hip cast is removed, the leg(s) may swell a little. Raise them up on pillows if this happens. At first your child may seem afraid of using the limb(s) freely. She may feel stiff or weak.

Encourage a slow return to normal activity. Very soon, she will gain confidence. Discuss your child's anxiety and any concerns you have with the doctor before you leave the hospital.

## **What Are Things That I Will Need At Home?**

Here is a check list of things that you might need when you bring your child home. The first six items on the list may be available at a local Red Cross branch by donation.

A list of Red Cross branches is available at the nurses station or online. Please call ahead to find out what is available. You will need a referral form from your physiotherapist or the orthopaedic clinic nurse in order to get these.

- Raised cutaway toilet seat
- Tilt Wheelchair with leg raises and/or stroller
- Crutches
- Car Seat
- Bedpan
- Urinal
- Waterproof tape
- J-Cloths®
- Saran Wrap®
- E-Z ON Modified Vest
- Modified Clothing

## **Resource List**

Family Resource Library

4480 Oak St. K2-126

2nd Floor Ambulatory Care Building

Vancouver, BC v6H 3V4

Tel: 604-875-2345 Loc 5102 / Toll Free: 1-800-331-1533

Fax 604-875-3455

Email: [famreslib@cw.bc.ca](mailto:famreslib@cw.bc.ca)

Website: [www.bcchildrens.ca/frl](http://www.bcchildrens.ca/frl)

Hours of Operation Monday to Friday 10-4pm

The Family Resource Library has a number of resources.

### **Red Cross**

Check phone listings for your local branch.

209 West 6th Avenue

Vancouver, BC

Phone: 604-301-2566

Hours: 9:30am – 4pm

Provincial Red Cross listings are available from one of your health professionals as well as a referral form which is needed.

### **EZ-On Products Inc.**

For EZ-On vests purchases.

Be sure to specify if you want the lying down (modified) vest. ( See below for sizes available)

### **Perry Rand Transportation Group Limited**

Box 10, Waterville, Nova Scotia

Website: [www.ezonpro.com](http://www.ezonpro.com)

Email: [shanebuchan@thebusboys.com](mailto:shanebuchan@thebusboys.com)

Phone: 1-902-434-4799 (Sandy)

Fax: 902-468-1465

Allow one week for shipping via courier. Cost is approximately \$200.00 excluding courier.

Check to see if your extended health benefits will cover this. \*\*A fax must be sent from a doctor or occupational therapist. The ortho nurse can facilitate this.

### **Healthlinc Medical Equipment Ltd.**

Unit 115 - 7011 Elmbridge Way, Richmond, BC

Phone: 604-264-8080 (Margaret or Shane)

They have other medical equipment including pediatric wheelchairs, urinals (male and female), slipper pans.

They will deliver for a fee. The Britax Hippo Car Seats and EZ-On vest rentals are available.

## **Retail Car Seats:**

### **Toys R US**

1154 Broadway West  
Vancouver, BC  
Tel: 604-733-8697

### **TJ's the Kiddies Store**

88 SW Marine Dr.  
Vancouver, BC  
Tel: 604-324-2888

### **Motion Specialties**

1562 Rand Avenue, Vancouver, BC  
Phone: 604-321-1009

Will order EZ-On Vest™ for purchase (measurements and doctor's orders are required). All 3-4 weeks for delivery. The cost is \$410.00.

### **Advanced Mobility Products Ltd.**

Unit 111-2323 Boundary Road  
Vancouver, BC  
Phone: 604-293-0002

Kiddie Cart (\$150.00/month). Kiddie cart would need adjustments done for recline and ideally for wheelchair taxis.

## **Specialized Car Seats/Restraints**

### **Spelcast Gorilla car seat Serial# 502-6334**

The Gorilla is a postural seating system and a car seat for children from 20 lbs (9kg) to 105 lbs (47.5kg). Its pad system and seat extension kit allows the seating area to be incrementally expanded from 8" x 8" to 14" x 14". The seat provides ample head, trunk, hip, and leg support for larger children with special needs. Requires a vehicle lap belt and tether combination to be effective.

### **Spelcast snug seat Model # 38-6004**

User Weight 10-40 lbs. Interior seat shell dimensions 12" wide x 7" deep Frame and shell dimension – reclined position 15" wide x 25.5" depth x 20.5" height. Frame and shell dimension – upright position 15" wide x 21" depth x 26" height. Interior back height 22.5". Seat depth – standard padding 6". Seat width – standard padding 13".

### **Britax Hippo Car Seat**

A specialized carseat to accommodate most casts.

Minimum rear facing 5lbs - 33 lbs.

Forward facing 20lbs - 65 lbs.

Please check with an Orthopedic Clinic Nurse as to where these are currently available.

### **E-Z-On Modified Vest Model number M203**

Size: SMALL: For most children ages 2-5

Wt. 20-65 lbs

E-Z Vest allows for the transport children in a prone or supine position securely. Certain physical disabilities (such as spinal injury, body cast, long leg cast or hip spica) require a child to "lie down" when riding in a vehicle. The Modified Vest enables these children to be transported safely and securely. Uses your vehicle's existing seat belts--no modification or locking clips are necessary. Just put the vest on the child (adjust it for a snug fit the first time you use it), lay the child on the seat, and secure the vehicle's existing seat belts after threading them through the sides of the vest and the leg belt.

### **E-Z-On Modified Vest Model number 101M2**

Size: MEDIUM: For most children ages 5-12

Wt. 20-100 lbs

E-Z Vest allows for the transport children in a prone or supine position securely. Certain physical disabilities (such as spinal injury, body cast, long leg cast or hip spica)

require a child to “lie down” when riding in a vehicle. The Modified Vest enables these children to be transported safely and securely. Uses your vehicle’s existing seat belts- no modification or locking clips are necessary. Just put the vest on the child (adjust it for a snug fit the first time you use it), lay the child on the seat, and secure the vehicle’s existing seat belts after threading them through the sides of the vest and the leg belt.

### **Who can I call if I have any problems?**

Having a hip or body cast may be challenging for both you and your child to get used to. If you have any questions, please call your Clinic Nurse in the Orthopedic Clinic. The number is 604-875-2609.

### **Your next appointment**

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Place: \_\_\_\_\_

Healthcare Professional: \_\_\_\_\_

Please phone the Orthopedic Clinic at 604-875-5526 if you are unable to keep this appointment.



Developed by the health care professionals of the Department of Pediatric Orthopedic Surgery with assistance from the Department of Learning & Development.

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