

Treating Hip Dysplasia with a Pavlik Harness

Royal Columbian Hospital



What is development dysplasia of the hip?

Some babies are born with loose hip joints.

The medical term for this is “developmental dysplasia of the hip” or hip dysplasia (say *dis-play-sha*).



With this condition, the hip socket does not fully cover the ball part of the upper thighbone (or femur). The ball part can either wobble in the socket or fall out of the socket. When it falls out of the socket, the medical term is dislocation.

How is this condition found?

Doctors and midwives check the hips of all children when they are born and during the first year of life. Often the first sign your baby might have this condition is when the doctor or midwife hears or feels a “clunk” when checking how the joint moves. Sometimes, an ultrasound or x-ray is needed to confirm the condition.

Parents might also notice any of the following signs:

- Knees at different levels
- One leg looks shorter than the other
- One hip might be less flexible than the other
- Baby might move one leg less than the other
- A limp when baby learns to walk

It is not your fault!

Remember, this condition cannot be prevented. It is nobody's fault. Some babies are more likely to have this condition.

It can be fixed!

The sooner we start treatment, the better. Any delay means the treatment will not work as well. A delay increases the chances of the baby getting hip arthritis in early adult life, and can result in lifelong disability.

How is hip dysplasia treated?

We treat the condition with a soft harness called a Pavlik Harness. It holds the ball part of the upper thighbone in the socket. This helps the socket mold to the shape of the ball as your baby grows. Your baby can still move their legs. The harness weighs about 100 grams (3 ½ ounces).

How long does my baby need the harness?

Your baby will likely have to wear the harness for 23 to 24 hours a day for 12 weeks. We let you know if you can remove the harness for short times. We check in with you regularly and might schedule added appointments during these 12 weeks.

How do I put the harness on my baby?

Our orthotist fits your baby with the harness as soon as possible and teaches you how it works. The orthotist adjusts the straps to keep your baby's legs in the best position.

The front leg straps control how much your baby can straighten their legs (extension) by bending your baby's hips (flexion). The back leg straps control how much your baby can close their hips (adduction) by holding their hips wide open (abduction). Only adjust the position of the straps if the specialist doctor or orthotist has instructed you to and shown you how.

It can take some babies a day or two to get used to the harness. Your baby might cry or seem unsettled. This is normal if they settle when held or fed. If your baby is not settling, please contact either the specialist or the orthotist.

When you are allowed to remove the harness for bathing or short periods, follow **Steps 1 to 5** for putting the harness on.

Step 1 Put on the chest section.

- Open the chest section out on a flat surface.
- Lay your baby with their back on the chest section.
- Fasten the chest strap. The top of the strap should be at their nipple level.



Top of strap
at nipple level

- Check that you can fit 2 fingers underneath the strap.

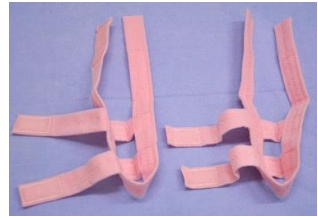


- Pull both shoulder straps over the shoulder and through the loops. Fasten each, making sure they are **equal**.
- Check that you can fit one finger underneath each shoulder strap.



Step 2 Place legs and feet into stirrups

- Open each stirrup.
- Place each leg and foot into a stirrup.
- Wrap the lower strap just above the ankle.
- Wrap the upper strap just below the knee.
- Check that you can fit one finger underneath each strap.
- Make sure there isn't any pressure in the back of the knee.



Step 3 Connect the front stirrup straps

- Connect the front leg straps to the lower loops of the chest strap.
- Tighten the straps until your baby's hips are bent at 90 to 100 degrees of flexion.
- Check that the straps are equally tight.



Step 4 Connect the back straps

- Connect the back strap into the chest loop on the back.
Make sure the hips stay bent at 90 to 100 degrees of flexion.
- Connect the second stirrup strap to the other chest loop on the back.
- Check to make sure the back straps are not too tight by gently pushing your baby's knees together. There should be a hand or fist space between the legs



Step 5 Testing strap tightness

- The orthotist marks the straps to where they should be tightened to but these can change as your child grows. Ask for more information if you have questions.

Care at home

Clothing: Use larger, loose-fitting clothing that can easily fit over the harness. Put clothing on overtop of the harness.

Skin Care: Check your baby's skin each day. Look for redness and any rubbing. If you notice any skin soreness, let us know.

Diaper Changing: Keep the harness on for diaper changes.

Bathing: Give your baby sponge baths when your baby must wear the harness 24 hours a day.

If allowed to remove the harness for bathing, only undo the Velcro straps. Do not adjust the straps. Try to keep baby's legs apart while the harness is off.

Always dry the skin well, especially in creases of the hips and knees.

Feeding: You can continue to breastfeed. You might need to try some different positions. Here are examples:

- Try the football hold.
- Try having your baby in a frog-like position against your body.
- Try supporting baby's bottom on a pillow.

Contact a Public Health Nurse or Lactation Consultant if you need help or advice.

Sleeping: Place your baby on their back to sleep. Place them in a sleep sack. Do not swaddle your baby's legs.

Tummy Time: Lay your baby over your arm, across your lap, or on your chest. Do not lay your baby face down on a flat surface, unless it is during the time they are allowed out of the harness.

Carrier: You can carry your baby in a regular carrier. Carriers should support your baby's thighs with their legs apart. Do not use a sling carrier.

Car trips: Keep car trips short. Always use a car seat. Keep the harness on.

Leg checks: Make sure your baby is moving their legs regularly. Look for them to be kicking both legs equally. If your baby is not kicking both legs, contact the specialist or orthotist *right away*.

Check your baby's feet during the day. Make sure their feet are warm to touch and pink in colour.

Harness: Try to keep the harness dry. Put a loose fitting one-piece bodysuit (onesie) or bib over the harness when your baby must wear the harness 24 hours a day. This helps to keep the harness clean and dry. Use a towel to blot dry any wetness.

When allowed to remove the harness, close all Velcro to the marks and either hand wash or machine wash on delicate cycle. Use lukewarm water and mild detergent. Tumble dry on low heat.

Questions and concerns

Any time you have any questions or concerns while your baby is wearing the Pavlik Harness, contact either the specialist or the orthotist.

We might schedule added appointments to check the fit of the harness.

Paediatric Orthopaedic Surgeon, Dr. Tarchala 604-522-2322

Certified Orthotist, Lisa Bennett 778-928-0182
info@orthos.ca

Online resources about hip dysplasia:

- Developmental dysplasia of the hip,
About Kids Health, Ontario
aboutkidshealth.ca/hipdysplasia
- International Hip Dysplasia Institute
hipdysplasia.org



My questions and the answers

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Certified Orthotist: A health care professional who makes and fits braces and splints. They work under a doctor's order. (say *or-thought-ist*)

Paediatric Orthopaedic Specialist: A doctor who is a specialist in the bones, joints, and muscles of babies and children. (say *pee-dee-aa-tric or-tho-pee-de-ick*)



Thank you to the parents who graciously allowed us to photograph their daughter for this resource!

www.fraserhealth.ca

This information does not replace the advice given to you by your healthcare provider.

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