

Leg Length Difference

Fact Sheet

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steps

We don't take walking for granted

Steps is the leading charity working for all those whose lives are affected by childhood lower limb conditions

What is leg length difference?



LLD has many names, including leg length difference/discrepancy, short leg syndrome, or anisomelia (although this could refer to your arms). Whatever you call it, it means one leg is longer than the other. But.....

Most people (about 60-70% of us) have a minimal leg length difference, less than 1 cm, and most of us will not notice the difference in our day to day life.

A difference of more than 1 cm is considered moderate and will impact how you walk and you are likely to feel back pain. A difference of more than 2 cm is considered significant and will often require medical treatment.

Why does it happen?

There are three main reasons for LLD.

1. Experiencing an accident or operation.

At the end of every long bone, there is a growth plate that tells your bone to keep growing. If this gets damaged (e.g. from a broken bone, a tumour, or surgery) it can stop that bone from growing.

2. A condition you were born with (congenital).
Some conditions you are born with can cause LLD. The reasons for these conditions are often not well understood.

3. A condition you developed (developmental).
Infections or other conditions that happen after birth can also cause LLD.

In some cases, the cause of the leg length difference may not be known at all.

How is it diagnosed?

There are lots of tests performed during and after pregnancy to check a baby's limbs, but some differences can be harder to spot.

Before a baby is born, an ultrasound scan looks for any differences in the baby's legs. They measure the femur (the longest bone) in each leg.

Once the baby is born, nurses will check the baby's legs to see if they're growing as expected, and this is often checked again at nine weeks old.

Sometimes, parents don't notice a difference until their baby starts learning to crawl.

If due to injury, LLD will be diagnosed by a doctor watching you stand and walk.

Doctors should be able to measure the difference in clinic, but sometimes they may ask for an X-ray, to take a pain free image of your bones.



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Steps Charity Groups:

Steps Charity - Support Group for Parents

Steps Charity - Support Group for Adults

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The Leading Charity for Lower Limb Conditions

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How is it treated?

There are lots of different ways to treat LLD, depending on how big the length difference is, and what impact it has on your life. They might give you special shoes, or wedges to help you walk more evenly. In some cases, they might need to do an operation to try and make the bone grow longer, or to make it easier for you to use prosthetic leg (a special artificial leg that you wear over your own leg). The doctors will look carefully at your needs after diagnosing, they might do more tests, like an X-ray, or an MRI, where they put you in a noisy tube to show details around the bone.

The doctors will choose the best way to help your case.

1. **Observation:** If your LLD isn't causing any problems, the doctors might just want to watch and wait. They will check your legs regularly to see how they're growing and if you feel any pain.
2. **Insoles and shoe lifts:** If the difference is small, the doctor might send you to see a special doctor called an orthotist. They will make special insoles or shoe lifts to help even out the length.
3. **Physiotherapy:** If the leg length difference is causing pain or making it hard to walk. A physiotherapist might help you move better and feel less pain.
4. **Surgery:** In some cases, doctors might suggest an operation. The most common is a Leg Lengthening operation, to try and lengthen the bone. Many children will need more than one operation as they keep growing.

After a leg lengthening operation you will go home with a fixator (something that fixes the bone in place), this can either be one you can see on the outside of the leg (external) or one inside that you can't see (internal).

Tips

For parents at hospital appointments

- Take someone with you – a second set of ears means you get more information
- Write questions down in advance and take a notebook to jot down answers
- Ask about follow up and more information
- Encourage the child to ask any questions they have

What does the future look like?

The future looks bright, children with LLD go on to do amazing things, even whilst having their treatments. They attend school, play with friends, go on family holidays, just like everyone else.

Going to the doctor and getting help as soon as you have concerns makes the biggest positive long term impact, it means that you can find the right treatment for you and know how to help yourself if you experience discomfort later in life.

This can be an emotional journey, as there are lots of doctors appointments and lots of decisions to make. Children can find it tiring, and that's okay, there is nothing wrong with a few recovery naps.



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Support

Steps is here to help

Contact Steps: +44 (0) 1925 750271 to answer any practical questions you have.

Email: info@steps-charity.org.uk with questions.

Family Contact Service: If you want to talk to someone who has been through a similar situation, one on one.

Facebook Group: A closed group where you can talk about your worries, share helpful tips, and find emotional support.



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