

# Toe Walking

Physiotherapy information for patients, parents and carers

## What is toe walking?

Toe walking is walking on tip toes, or without your heel coming into contact with the ground. It can be some, most or all of the time.

## What causes toe walking?

Toe walking in most children is usually a normal part of development and many children will simply grow out of this. Many children grow out of it by 2 years old but others can continue until they are about 6 or 7 years old. If there is no clear cause or other medical condition which causes toe walking, this is known as idiopathic toe walking.

In a very small number of children, toe walking might be due to one of a number of other conditions that may require further investigation. These can include neurological, neuromuscular or developmental disorders. Toe walking is also much more common in children with autistic spectrum disorders (ASD) and developmental disorders.

# Is toe walking harmful?

Toe walking generally does not cause any harm to children. It does not usually cause pain or deformities and can often simply be a habit.

Frequent toe walking can be associated with tight calves (the muscle that runs from the back of your knee to your achilles tendon at the back of your ankle). Tight calves can make it more difficult to walk with your heels down and can occasionally cause some discomfort.

# What can I do to help my child?

- Encourage your child to stand with their heels down to play (e.g. at a table or couch).
   Older children may also respond to being told to walk with their heels down
- Daily stretches can help prevent tight calf muscles. Do either of the following twice a day, holding for 30 seconds each time

#### Assisted stretch



#### Wall stretch



- Encourage your child to regularly wear supportive, sturdy footwear like boots or trainers
- Encouraging play based activities such as walking on heels, walking carefully on a line (like a tightrope) and playing or walking in both a squat or 'bear crawl' position

Bear crawl Squat



 You can gradually reduce how much you do these activities as things improve but if your child begins to show signs of toe walking again then keeping them as part of your child's routine may be helpful.

## How could physiotherapy help?

A physiotherapist will gather details about your child's toe walking to decide if they need further assessment and any treatment. Assessment will involve looking at your child's walking and motor skills, as well as looking at the strength and flexibility of the muscles in their legs.

The physiotherapist may give you advice on things you can do at home to help with toe walking. This may be all that is needed for many children and is likely to be the same as the list in the 'What can I do to help my child?' section above.

In other cases, your child may need further assessment or treatment which will vary between individual children but may involve a period of serial casting (casts put onto your child's lower legs) or further assessment by an orthotist.

#### When should I seek assistance?

- If your child is unable to walk or stand with their feet flat
- If standing or walking with heels down looks awkward or difficult
- If your child's legs feel stiff or any of their other movements look awkward
- If toe walking is causing problems with your child's balance or daily activities
- If your child has any pain or discomfort in their calves
- If toe walking is only on one side, or is more evident on one side only
- If your child has been toe walking most or all of the time for a period of 6 months or more and has not improved by doing the activities listed in the 'How can I help my child?' section
- If your child is older than 18 months and unable to walk independently due to toe walking.

#### How effective is the treatment?

Every child responds differently to treatment. Some will improve with the activities you can try at home and others may need further input from a physiotherapist. Some children may only need a short period of treatment and some will need to continue the exercises and activities for a longer period of time, or re-start them at a later point. There will be some children who will continue to toe walk even after a period of treatment and whilst this can be frustrating, it is usually nothing to worry about. Children with conditions such as autistic spectrum disorder (ASD) may need to continue with home stretching and activities over a longer period of time but there is still no guarantee that this will stop their toe walking.

### Any more questions?

If you want to discuss any of the information in this leaflet further, or feel you would benefit from discussing your child with a physiotherapist please contact us on the numbers below.

### **Contact telephone numbers**

If you live in Edinburgh please contact Children's Physiotherapy on 0131 312 1079

If you live in East Lothian or Midlothian please contact Children's Physiotherapy on 0131 446 4009

#### References

Ruzbarsky JJ, Scher D and Dodwell E. Toe walking causes, epidemiology and treatment. Current opinion in paediatrics 2016.

Williams CM et al. Interventions for idiopathic toe walking. Cochrane Database of Systematic Reviews 2016. [DOI: 10.1002/14651858.CD012363]