



# A Parent's Guide to Pediatric Toe Walking

By Liesa M. Persaud, PT, DPT, PCS, CKTP

Toe walking is an area of interest for many parents. Be wary, however, the information generally available tends to be outdated. A complete improvement of toe walking is possible – without Botox, surgery, or restrictive braces. "No poison, no knives!"

## What is toe walking?

Toe walking is not a part of normal development. It is a visible symptom of other problems that are not yet evident. As with most developmental issues, it is best dealt with quickly to reduce the chances of bigger problems in the future.

Toe walking is correlated with the overuse of supportive toys and furniture. Because of autism, toe walking can no longer be viewed as having a musculoskeletal etiology. So, a thorough evaluation of toe walking **MUST** include an assessment of all other systems (such as balance, vision, etc).

## Is my child toe walking?

Your child may not actually be "toe walking." Instead, this gait may be a part of normal development. However, it is very short-lived and looks different from problematic toe walking. Toe walking may not be cause for concern if:

- Your child takes a few steps on their toes and then returns to flat feet.
- The "toe walking" reduces in frequency.
- Your child has only been walking independently for several weeks.

# What are some red flags?

Toe walking may be problematic if one or more of the following criteria are also true:

- Your child has been walking independently for longer than 6 months.
- Their ankles are getting tighter, and your child has difficulty standing on flat feet.
- Your child is sensitive to sensory stimulation (e.g. dislikes having their feet touched, getting their hair brushed, or is bothered by clothing tags).
- They are clumsy, fall often, bump into things, or “trip over their own feet.”
- They are either experiencing, or have a history of, delayed milestones.
- Your child has difficulty with speech or learning.
- Your child was premature or had a low birth weight.
- They love spinning, and similar activities, more than other children.
- They get carsick.

# What are the consequences?

The main concern is the bony deformities that happen in the first 2-4 years of walking. These deformities often go on to cause pain in other areas of the body (limbs, feet, hips, and low back). Unfortunately, because of the way the skeleton develops, these deformities are difficult to reverse once the symptoms of pain and dysfunction are noticed.

If you have concerns, consult a pediatric physical therapist – preferably one who is experienced and successful in treating toe walking.

## About the Author

Liesa M. Persaud, PT, DPT, PCS, CKTP is a licensed physical therapist with 23 years experience in the field of adult and pediatric therapy. View Liesa's webinars on MedBridge and contact her for further information on pediatric toe walking at her website: [www.knowtochange.com](http://www.knowtochange.com).

## References

Dilger N. Orthopaedic Interventions for Pediatric Patients: The Evidence for Effectiveness. Independent Study Course 15.1.3. [http://footprintsphysicaltherapy.com/wp-content/uploads/2015/01/Dilger\\_ITW.pdf](http://footprintsphysicaltherapy.com/wp-content/uploads/2015/01/Dilger_ITW.pdf)

Bertsch C, Unger H, Winkelmann W, Rosenbaum D. Evaluation of early walking patterns from plantar pressure distribution measurements. First year results of 42 children. *Gait Posture*. 2004;19(3): 235-242.

Aharonson, Z., Voloshin, A., Steinbach, T., Brull, M. and Farine, I. (1980) 'Normal foot-ground pressure pattern in children', *Clinical orthopaedics and related research.*, pp. 220-3. <http://www.ncbi.nlm.nih.gov/pubmed/7428224>

Grant-Beuttler M, Palisano RJ, Miller DP, et al. 2009. Gastrocnemius-soleus muscle tendon unit changes over the first 12 weeks of adjusted age in infants born preterm. *Phys Ther*. 2009;89(2):136-148.