



Patient and Family Education

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.

What is toe walking?

Toe walking is when a child walks on his tiptoes instead of placing his heel down to step forward.

- Children toe walk at times when they first learn to walk.
- Most children outgrow toe walking by age 2.
- If your child toe walks after age 2, talk with his doctor. Your child may need to be checked to find out if there are any problems causing it.

Why does my child toe walk?

There are many causes for toe walking. Your child may also toe walk for an unknown reason. This is called idiopathic toe walking. Common traits of children with idiopathic toe walking include:

- Often able to walk with heels down when asked to do so but returns to toe walking when distracted.
- May have tightness of lower leg muscles.
- May have a family history of toe walking.

Toe walking can also be caused by:

- Cerebral palsy
- Autism
- Problems processing information from the senses (eyes, ears, nose, mouth and skin) to the brain. This is called sensory processing disorder.
- Balance problems or muscle weakness
- Other problems with the brain, nervous system or muscles

What are the long-term effects if my child continues to toe walk?

If toe walking is not treated, your child may have one or more of these:

- Tight muscles and tendons
- Abnormal stress on the bones and ligaments of the knees, hips and lower back. This can cause pain over time.
- An increased risk of falling and injury due to lack of coordination
- Problems keeping up with peers in PE classes or sports. This can affect self-esteem.

What special tests could my child have?

Your child's doctor may refer your child to:

- An orthopedist (doctor who cares for people with bone and muscle problems) or
- A neurologist (doctor who cares for people with problems of the brain, spinal cord and nerves)

The doctor may need to do further tests. Talk with the doctor about your child's needs.

What treatments could my child have?

Your child may have one or more of these:

- Physical therapy exercises to stretch and strengthen muscles.
- Serial casting if muscles in the lower leg (calf) are tight a way to help stretch muscles and joints by using a series of casts on the leg.
- Leg braces, such as an AFO (ankle-foot orthosis) a type of brace that keeps heels down when walking.
- Night splints a type of brace that is worn at night to keep muscles stretched.
- Botulinum toxin A injection type of shot that is given to relax tight muscles.
- Surgery to cut part of the muscle that is too tight may be needed if other treatments do not help.

Your child may also need exercises to help correct the problem. Your child's doctor and physical therapist will:

- Let you know which of the activities listed below to do with your child.
- Teach you how to do them.
- Let you know how often to do them with your child.

Exercises for all children:

- Duck walk down hallway lift toes high toward the ceiling while walking on the heels.
- Pull or push a laundry basket filled with toys keep heels down.
- Balance on one foot while keeping heels flat exercises that work on balancing on one foot:
 - Pick up marbles with toes, and place them into bucket.
 - Pop bubbles with toes have someone blow bubbles, and catch them on the wand. Have your child pop the bubble with his toes lifted in air.
- Perform wall slides lean back against a wall with legs out from wall about 8 inches. Slide the back down the wall until the knees bend to a 80 to 90 degree angle. Stay in this position for 10 to 15 seconds.

Walk, jump and hop

- Wear 1 to 2 pound ankle weights when walking and running for 30 minutes at a time.
- Walk up hills or inclines try to keep knees straight and heels down.
- Jump up and down on 2 feet for 10 seconds at a time, keeping heels down.
- Hop on 1 foot on the floor or grass.
- Walk along curbs or railroad ties in a safe place like the park. Keep the heels down.

Your child's therapist or doctor may also advise "squeaker shoes". These shoes squeak when your child walks correctly. Several brand names to look for are: Wee Squeak, Squeakers, Itzy Bitzy or Little Blue Lamb. Another type that is placed around shoes your child has already is called the Gait Spot.

Exercises for older children:

- Walk on a treadmill with an incline.
- If you have a Nintendo Wii, play balancing games, such as Wii Fit yoga pose.
- Roller skate in a safe place. Hold your child's hand if he is younger or unsteady. Have him wear a helmet and other protective gear.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.