



Idiopathic Toe-walking

Toe-walking is persistent walking on the toes or the balls of the feet. Toe-walking is fairly common in kids who are learning to walk.

Causes

In nearly all cases, toe-walking is a habit that develops as a child learns to walk. This is called idiopathic toe-walking. Rarely, toe-walking may be a symptom of a more serious condition such as:

- A shortening of the tendon connecting the leg muscles to the heel bone (the Achilles tendon)
- Brain, nerve or muscle disorders
- Developmental disorders

Symptoms

Idiopathic toe-walking will have no other symptoms. Most children with toe-walking can walk with their heels down for short periods when asked to do so. If your child has other symptoms, such as weakness, stiffness, poor coordination, or difficulty with small movements (like fastening buttons), this may indicate a more serious condition and your child should be evaluated further by a doctor.

Diagnosis

Your child's doctor will review your symptoms and perform a physical examination of the muscles and skeleton. Your child's doctor will watch your child walk and perform other exercises. This examination is usually enough to diagnose idiopathic toe-walking. However, if your child's doctor is suspicious of an underlying condition, further testing may be needed, such as imaging of the spine, muscle testing or developmental evaluation.

Treatment

Idiopathic toe-walking is a habit that most children outgrow. To prevent further tightening of the calf muscles, many doctors recommend gentle stretches of the leg and foot muscles. A splint can be used at night to keep the calf muscles flexible. Physical therapy sessions may be helpful to learn exercises that encourage walking on the heels.

When toe-walking is due to an underlying condition or when it does not respond to the above treatments and causes problems with function, a series of leg casts (serial casting) followed by bracing may be used to help stretch the leg and foot muscles. Rarely, surgery is necessary to lengthen the Achilles tendon or calf muscles.

Prevention

There is no proven approach to prevent toe-walking. Gently encouraging toddlers to use their entire foot when walking may help some children from developing toe-walking.