

# Toe Walking

Most tip-toe walkers are normal children. They begin walking on their tiptoes from the beginning. When they stand still, most children can place the foot flat on the ground.

## CAUSES

The majority of children who walk on their toes are born with a shortened calf muscle or tendon. The shortened tendon limits ankle and foot motion upward. There is a tendency to land on the ball of the foot rather than the heel and the “habit” of toe walking develops. By one to three years of age, most children walk foot-flat or heel-to-toe.

## TREATMENT

Initial treatment may attempt to improve the flexibility in the calf muscle and change the walking pattern. Therapy is used to stretch the calf muscle and strengthen the shin muscles. This first step may be combined with a four to eight week trial of nighttime splints, full-time casts or full-time 3-D braces. Unfortunately, high top shoes only mask the problem. The vast majority of children will respond to this treatment plan and have a long-term satisfactory walking pattern.

## SURGERY

Some children have significant tightness or shortening of the calf muscle which may cause problems to develop. Common complaints include increasing tripping, abnormal shoe wear, pain under the ball of the foot, or outward twisting of the feet. The surgical option may be discussed before an abnormal gait pattern is permanently established. Under general anesthesia, the calf muscle tendon is lengthened to allow improved upward movement of the foot and ankle. After four to six weeks in a cast, regular shoe wear and therapy are resumed. The calf muscle will then have to grow and strengthen over the next four to six months in order to have a normal walking pattern. The possibility of recurrence is low.

