Toe Walking Information and Exercises

What is toe walking and why can it occur?

Toe walking is quite common between the ages of 10 to 18 months when the child is learning to take his first steps. However, if toe walking persists beyond 18 months, it should be checked by a physician to see if there is any problem. There are many causes of toe walking, but the three major causes are as follows.

Muscle spasticity in the Calf muscles, especially the Gastrocnemius and Soleus muscles. This is often a manifestation of Cerebral Palsy, due to anoxia (lack of oxygen) to the brain around the time of birth. Other muscles in the body may also be affected, but the calf muscles become tight over time, causing the ankle to be fixed in Equinus (the foot points downwards). In the early stages, a thermoplastic brace (AFO) may control the Equinus, but over time, surgery to lengthen the heel cord (Achilles tendon) is necessary.

Congenital tight heel cords occur in some children. There is no problem with any other muscles in the body. Only the heel cords are tight. Could this be an isolated form of cerebral palsy, or could the child be born with just tight heel cords? No one knows. But the treatment is the same - use of a thermoplastic brace (AFO) or surgery in the more severe cases.

Habitual toe walking. Some children persist in toe walking, even though examination reveals their heel cords are not tight. When asked to walk normally with a heel-toe gait, they can. But when not concentrating, they naturally get up on their toes. Nagging does not help. Very often, the problem resolves by itself. In the more persistent cases, using a thermoplastic brace (AFO) to enforce plantigrade walking for 3 to 6 months may help.

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Exercises

Calf Raises: The idea of this exercise is to lengthen the calf muscle by working the thigh muscles as brakes (like walking down hill). Stand on an inclined plane. Raise up on your toes and lower yourself using your calf muscles to control the downward movement. Try to do 100 of these per day (i.e., 10 sets of 10, 2 sets of 50, 4 sets of 25).

Balancing Activities: The idea of these activities is to concentrate on using your entire foot instead of just your toes.

Place 10 marbles or other small items on the floor beside a container. Standing on one foot, use your toes on the other foot to pick up on marble at a time and drop it into the container. After all 10 items are in the container, repeat this exercise using the other foot.

Walk a straight line concentrating on using a heel-to-toe patter. Begin with one foot on a line, place your other foot directly in front of the first foot, matching heel to toe. Repeat this action for at least 10 steps. When this becomes too easy, add spelling words into the activity, saying one letter of the word for each step.

Stand on a pillow or piece of foam to do activities at a table (i.e., puzzles, cards, board games).

Stand on one leg, keeping foot flat on the ground. Reach down to touch the floor at a point to the left of the stance foot 3-12", then return up without losing balance. Repeat 3-12" in front, and then to the right. Goal is 30 reaches total with no balance loss. Repeat on the other foot. When this becomes too easy, try closing one eye, and then both eyes.

Tree Huggers- Stand with arms out in front of you as if hugging a tree. Lift toes and front of feet up so you are on your heels. Don't bend at the waist or lean forward (you should be leaning back a bit, but don't stick butt out too far!). Goal is 50 times without loss of balance.

Squat for Play: Squat down to play with an item on the floor, making sure to keep feet flat and feet and knees apart. If this is too difficult to start with, sit on a playground or basketball.

Mouse House: Stand with feet apart, toes pointing forward and weight spread evenly between feet. Raise up the arch muscles on the inside edge of the feet, creating more space under the feet (i.e., room for a mouse). Try not to let the feet roll in to the middle.