

Idiopathic Toe Walking in Toddlers



In many children toe-walking is a brief transient phase. Heel-toe walking is normal by 18 months, so GP screening and referring toe-walkers to Paediatric Physiotherapy after this age is recommended.

Toe walking has a very small possibility of associated undiagnosed neurological conditions.

Idiopathic Toes Walking (ITW) is toe walking that is persistent with no other issues. It is a diagnosis of exclusion, therefore neurological exam and developmental screenings are required to rule out any neurological conditions. Your GP and Paediatric Physiotherapist can help rule out these conditions, or refer your child for further testing.

ITW is frequent in children with communication disorders and learning disabilities. It can serve as a marker for speech/language delays, fine motor delays, visuomotor delays, gross motor delays. Paediatric Physiotherapy Assessment screens for such possible issues.

Paediatric Physiotherapy treatment of Toe Walking depends on individual assessment. It may consist of: advice on sturdy shoes or boots, stretching tight leg muscles, balance exercises, strengthening of foot/ankle, hip and core muscles, mobilisation of stiff ankle or foot joints, practice of gross motor skills (such as hopping, jumping, squatting, stairs), custom moulded orthotics, gait retraining, sensory integration exercises, kinesiotaping, massage and manual therapy. The goals of treatment are to reach 10° degrees of ankle flexion, normal gross motor skills for age, normal balance for age, predominant heel-toe walk.

If ITW is left untreated there is increased risk of ankle injury from tight ankles, increased foot pain and pathologies in adults. Tight gastrocnemius muscles usually develop in constant toe walkers. Older children develop excessive external tibial torsion "out-toeing" to accommodate muscle contractures. For severe cases of Achilles' tendon contracture the use of night splints, AFOs, serial casting or surgery may be required. Early referral of 2 year olds is recommended for better outcomes through conservative treatment.

References:

Le Cras S et al. (2011) Evidence-based clinical care guidelines for Management of Idiopathic Toe Walking

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Sala D et al. (1999) Idiopathic Toe-Walking: a Review *Developmental Medicine & Child Neurology*.