

Treatment Options

- Physical Therapy - Best with very young children or in combination with other treatment methods^{9, 25, 26, 27}
- Orthoses – mixed results²⁶
- Casting - Individual or serial casting⁵
- Botulinum toxin A - Poorest evidence of treatment effectiveness^{25, 27, 33}
- Surgery - Long-term, higher risk, effective treatment for children with limited dorsiflexion or fixed ankle joint contracture^{11, 15, 33}

Resources

For a list of references, please visit:

<http://dptcapstone.web.unc.edu>



Thank You

You can find more information about Idiopathic Toe Walking and multiple other topics by visiting

<http://dptcapstone.web.unc.edu>

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Childhood Idiopathic Toe Walking

Information for Providers



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Diagnosis of ITW early is essential to reduce long-term complications and reduce invasive treatments!

Target Population: Children

- Demonstrate toe walking since ambulation at 12-18 months^{7,11}
- No known presence of nervous system, musculoskeletal, neuromuscular, or pervasive developmental disorders^{4, 18}
- Diagnosis of exclusion with the underlying pathology needing further research^{4, 18}
Boys > Girls are affected⁵

Toe Walking Signs and Symptoms

- About age 2 years and older with no elimination of toe walking^{1-9, 11}
- Parent reports the child spends the majority of ambulation toe walking (may or may not demonstrate ability to heel strike with ambulation)^{11, 21, 25}

- Toe walks unilaterally or bilaterally^{11, 22}
- Ankle dorsiflexion limited due to gastrocnemius, soleus, and Achilles tightness or contracture^{11, 13, 15, 18}

Recommended Examination

- Parent reported history
- Sensory Processing Screening
- Physical Assessment
 - Neurological Exam
 - Musculoskeletal Exam
 - Gait Exam
 - Gross Motor Skills Assessment

Differential Diagnosis

2,4,7,8,11,18,20,21, 22

- Central and Peripheral Nervous System Disorders
- Peripheral Neuromuscular Disorders
- Musculoskeletal Disorders
- Developmental and Pervasive Disorders
- Idiopathic Toe walking

Refer to Physical Therapy

- Stretching & Strengthening
- Neuromuscular re-education
- Manual Therapy
- Ankle mobilization
- Orthotic intervention
- Gait Training
- Serial Casting
- Post surgical rehabilitation
- Home Exercise Program
- Parent Education