

Randall Children's Hospital

Co-Management and Referral Guidelines

Intoeing

Randall Children's Orthopedics

Phone: 503-413-4488

Fax: 503-413-1812

Introduction

- Intoeing is a condition where a child's feet turn in when walking, rather than pointing straight ahead (excessive inward foot-progression angle).
- Typically, the child has no limitations or complaints, but parents are often concerned that the child will have permanent disability.
- Most cases are minor, self-limited and require no treatment.
- The most common causes are:
 - Metatarsus adductus (curved foot)
 - Increased or persistent tibial torsion (shin twists inward)
 - Increased or persistent femoral anteversion (thigh bone turns inward)
- Rarely, the child's intoeing is actually caused by a more significant problem such as a neurologic disorder, Blount's disease, metabolic bone disease or a skeletal dysplasia.

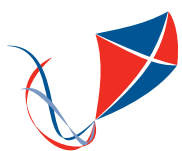
Evaluation and Management

- **Metatarsus adductus:** The foot bends inward from the mid part of foot to the toes. Most cases spontaneously resolve. If the foot is flexible and is able to be passively corrected, it will likely resolve spontaneously. No treatment is necessary unless the foot is rigid (cannot be passively corrected) after 9 months of age.
- **Tibial torsion:** Common in newborns from "packaging" in the womb. This condition almost always improves without treatment. No consideration for surgery is needed until at least 8 to 10 years of age. Evaluate the relationship of the patella to the bimalleolar axis to quantify.
- **Femoral anteversion:** Often this is most evident around 5 to 6 years of age. Evaluate with the patient prone on a table with knees bent; see how far the feet can flare out to the sides. This condition is seen in children who "W" sit, and it spontaneously corrects in nearly all cases. Surgical intervention is not considered, unless the child is having a functional problem after 9 to 10 years of age.

When to refer

- Patients over 9 months of age with rigid metatarsus adductus
- Patients over 8 to 10 years of age with persistent tibial torsion or femoral anteversion that is causing functional problems
- Patients who have progressive, asymmetric deformity or other neurologic abnormalities need further evaluation and possible referral to neurology or neurosurgery.

(continued)



Referral process

Randall Children's Orthopedics

To make a referral refer via Epic or [fax the Randall Children's Hospital–Specialty Referral form](#) to 503-413-2419 (OR) or 360-487-1033 (WA).

For urgent referrals, call Legacy One Call Consult & Transfer: 1-800-500-9111 to speak with the on-call orthopedic surgeon.

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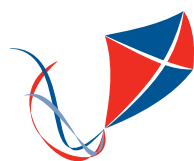
Additional Resources

Pediatric Orthopaedic Society of North America and American Academy of Orthopaedic Surgeons information sheets

<http://orthoinfo.aaos.org/topic.cfm?topic=A00055>

Updated February 2023

Find this and other co-management/referral guidelines online at: legacyhealth.org/randallguidelines



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