The Association of Paediatric Chartered Physiotherapists

APCP Information – Intoeing Gait

Information for parents and carers

What is Intoeing Gait?

Some children's feet point inward when they walk. This is known as Intoeing. It is common in children and may affect both feet or just one.

What are the common concerns?

Children who intoe may sometimes trip and fall more often when learning to walk. However, Children who intoe can be just as good at sport and are no more likely to suffer back or hip problems or arthritis than anyone else. It will not affect your child's ability to walk, run or jump in the long term.

Intoeing may be more obvious if your child has flexible joints or when they are tired. It will not get worse and should improve over time.

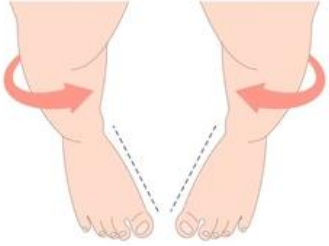
What are the contributing factors?

There are four main contributing factors for Intoeing gait in a healthy child:

1. **Metatarsus Adductus:**

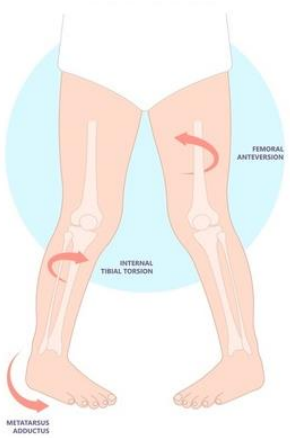
This is when the foot curves in. This is often caused by cramped space in the womb and is evident from birth. Most will resolve spontaneously.

2. **Tibial Torsion:**



This is when the shin bone turns inward, causing the foot to also turn inward, despite the kneecaps facing forward. Typically, this corrects itself as children reach age 4-5 years. As their bones grow, walking pattern matures, and knees straighten.

3. **Femoral Anteversion:**



This is where the thigh bone turns inward, leading to the leg turning inward.

This is the most common cause of Intoeing. It's often noticeable between ages 2-4 and typically resolves by age 10, although it may persist in some adolescents. This condition is more common in girls, can be hereditary, and usually improves naturally as children grow.

4. **Tight or weaker muscles:**

Tight muscles such as the hamstrings at the back of the thigh, can also contribute to Intoeing. This tightness might worsen following a growth spurt, but a stretching program can help alleviate this. Occasionally, weakness in the hip muscles that turn the leg outward can also cause the legs to turn inward.

What can I do to help?

Often with natural growth and development, walking pattern and Intoeing will improve.

Some children may continue to intoe past 10 years old. Treatment is not normally needed if there is no pain or associated difficulties. Occasionally, muscle weakness can lead to pain and functional issues in this age group, and physiotherapy can be beneficial in such cases.

Splints or special shoes have not been proven to be useful, but it is recommended to provide your child with good quality, well-fitting shoes. For more information, refer to the APCP "Choosing Footwear for Children" leaflet.

Activities that encourage strength of your hips and legs are advised, e.g., running, jumping, swimming, kicking a ball, riding a bike or a scooter.

As your child gets older, practising activities to strengthen the hip muscles such as out-toed walking (penguin walking) or walking along a straight line (keeping feet straight) may help.

Encourage your child to sit cross legged if it is comfortable for them to do so.

It is important to encourage your child to stay active. According to the **World Health Organization**:

- Children under 5 should engage in a variety of physical activities for a total of 180 minutes throughout the day.
- Children and adolescents aged 5-17 should aim for an average of 60 minutes of moderate-to-vigorous aerobic activity per day, spread across the week.

When should I get more help?

Intoeing is common during growth. However, if you remain concerned about your child or if your child demonstrates swollen joints, limping or continues to trip and fall, you should seek a review with a professional.

This leaflet has been produced by the APCP MSK committee after a review of literature and where there is a lack of evidence, a consensus of expert opinion is agreed, correct at time of publication. For information about references and evidence searched, please visit our website. APCP https://apcp.csp.org.uk V3 published March 2024 V3 review March 2029.

The Association of Paediatric Chartered Physiotherapists (APCP) is one of the CSP's largest Professional Networks and continues to thrive with a membership of over 2,900 paediatric members. We encourage our members and support staff to work together to enhance the quality of life, wellbeing and independence of babies', children, and young people that we deliver care to.

The Chartered Society of Physiotherapy (CSP) is the professional, educational and trade union body for the UK's 64,000 chartered physiotherapists, physiotherapy students and support workers.