**Information brochure**

# INTOEING

Children who walk with their toes turned in are described as having intoeing (or being 'pigeon toed'). The feet curve inward while walking and running instead of pointing ahead. This is a common presentation to a Paediatric Orthopaedic out patient clinic.

## Frequently asked questions

### My 2 year child's feet are turned in while walking and running. Is this abnormal ? Will it lead to permanent disability ?

Intoeing is usually due to either the feet curving in (metatarsus adductus) or a twist in the shin bones (tibial torsion) or a twist in the thigh bones (femoral intorsion).

A Paediatric Orthopaedic surgeon will be able to distinguish between the various causes of intoeing and advise you accordingly.

The most common cause of intoeing in a child is femoral intorsion (or increased femoral anteversion). All children have a certain amount of twist in their thigh bones at birth, which is first noticed when the child starts to stand or walk. This may be more apparent in some children than others. The twist in the thigh bone allows the child to sit with their legs bent back at the knees (W position).
Most often, the child will outgrow this condition and the intoeing will correct naturally without any permanent disability.

### Will my child's intoeing worsen over time ? Will it stop him or her from participating in sports ?

Intoeing does not progressively worsen over time and does not cause pain or functional limitation or arthritis.
It is well known that intoeing will improve over time in all cases without any formal treatment.

### Do we need to take xrays to check for any abnormality ?

If the clinical picture is consistent with a physiological growth variation, xrays are not necessary.

If there is any concern that the rotational deformity may be secondary to other problems or if the pattern of rotational malalignment is asymmetric or associated with pain or limp or inappropriate for the age, further investigations will be necessary.

**Do I need to massage the legs or make my child wear splints or special shoes for correcting the intoeing ? Does the child need physiotherapy or stretching exercises ?**

It is very likely that your child will outgrow this condition and intoeing will correct naturally without any active intervention. Femoral intorsion may take up to 8 / 9 years of age for spontaneous correction.

Massage, stretching exercises, physiotherapy, splintage or special shoes have not been shown to make any difference at all. Rigid splints, braces or special shoes may be harmful in limiting the natural mobility of the child by being uncomfortable and heavy. They may also make the child vulnerable to unnecessary emotional stress or bullying from their peers.

**How does one treat the intoeing if the correction is incomplete ? Is there any role for surgery in the correction of these deformities ?**

The natural history of intoeing secondary to femoral or tibial torsion is spontaneous improvement over time and there is no role for primary surgical correction at all.

If the correction is incomplete and if the child has functional problems due to intoeing i.e. frequent falls due to the feet tripping on each other and if the gait is unsightly, there is a role for surgery in the older child (8 / 9 year old). This would involve breaking the bone and resetting it after correcting the twist. This scenario is fairly uncommon since the natural history is spontaneous improvement in almost all cases.