

Paediatric Flat Feet

This leaflet provides information about paediatric flat feet. If you have any further questions or concerns, please speak to your orthotist.

What is considered flat feet?

Flat feet are considered a normal foot shape that is present in many children and adults. It is characterized as a lowering of the medial longitudinal arch, causing the inside of the foot to appear 'flat'.

It is a normal observation in typically developing children up until the age of 4-6+ years and is thought to be caused by the hypermobility and ligament laxity present in children. In most cases, the arch spontaneously develops during the first decade of life. This presentation is generally not symptomatic and does not usually require any treatment.

Research suggests that at least 4-23+% of children with a diagnosis of flat feet carry this into adulthood. This variation is because many people living with flat feet have never sought treatment and are therefore unknown.

It is important to note that there are no exercises, braces, shoes, or orthotics that will change the shape of a flat foot.

Types of flat feet:

Your orthotist will undertake a clinical assessment to classify flat feet into a flexible or rigid diagnosis.

Flexible flat feet:

This is the most common type of flat feet accounting for roughly two thirds of the clinical population. In children with this diagnosis, their feet will only be 'flat' when they are

weightbearing. In sitting there will be a subtle arch formation, this can also be seen by standing on the toes or dorsiflexing (pulling up) the big toe.



Treatment:

Asymptomatic flexible flat feet:

For children with flexible flat feet with no pain or functional impact, there is no clinical evidence for orthotic management, as it does not bring about structural changes in the foot.

Studies have also suggested that the flexibility of the muscles around the foot are a more important feature than the appearance. It has been identified that tightness in the calf muscle is found in 25% of those with flexible flat feet and this tightness can be the cause of pain and functional impact as opposed to the structure and shape of the foot itself.

As a result, general strengthening and stretching of the foot and calf paired supportive footwear is what we recommend for these patients.

Symptomatic flexible flat feet:

Whilst most people do not experience any pain, some presentations are associated with pain and reduced function, in these cases conservative intervention may be warranted. This will involve general strengthening and stretching of the foot paired supportive footwear as well as an off the shelf foot orthosis to help manage and reduce the symptoms.

Soft over-the-counter orthoses have been shown to relieve or diminish symptoms of symptomatic flat feet, with evidence suggesting that these are just as effective in this patient group as custom insoles.

Symptomatic rigid flat feet:

Rigid flat feet are determined by lack of arch formation in the tests mentioned above. The consensus amongst the literature is that people with this diagnosis who experience pain will require some form of treatment.

Conservative management for this will generally involve a custom, accommodative foot orthosis to help relieve and manage symptoms.

Why don't we provide insoles for all flat feet?

The reason why we do not provide orthotics for all flat feet presentations is not only that there is no consensus clinical evidence to do so, but in some cases, has been found to result in dependency. Some studies have found that patients who were provided with orthotics for asymptomatic flat feet early in life that ceased wear, were at an increased risk to develop symptomatic flat feet as an adult due to a dependence on their orthotics.

Contact us:

If you have any questions or concerns about orthotics, please contact admin on 020 8487 6056/6033 (Monday to Friday, 8:30am to 4pm). Out of hours, please email: orthotics.qmh@stgeorges.nhs.uk

References:

Mosca, V. S. (2010). Flexible flatfoot in children and adolescents. *Journal of children's orthopaedics*, 4(2), 107-121.

Garcia-Rodriguez, A., Martin-Jiménez, F., Carnero-Varo, M., Gómez-Gracia, E., Gómez-Aracena, J., & Fernández-Crehuet, J. (1999). Flexible flat feet in children: a real problem?. *Pediatrics*, 103(6), e84-e84.

Choi, J. Y., Hong, W. H., Suh, J. S., Han, J. H., Lee, D. J., & Lee, Y. J. (2020). The long-term structural effect of orthoses for pediatric flexible flat foot: A systematic review. *Foot and ankle surgery*, 26(2), 181-188.

Hösl, M., Böhm, H., Multerer, C., & Döderlein, L. (2014). Does excessive flatfoot deformity affect function? A comparison between symptomatic and asymptomatic flatfeet using the Oxford Foot Model. *Gait & posture*, 39(1), 23-28.

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9am and 5pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111



Reference: OFT_PFF_01 **Published:** January 2026 **Review date:** January 2028

