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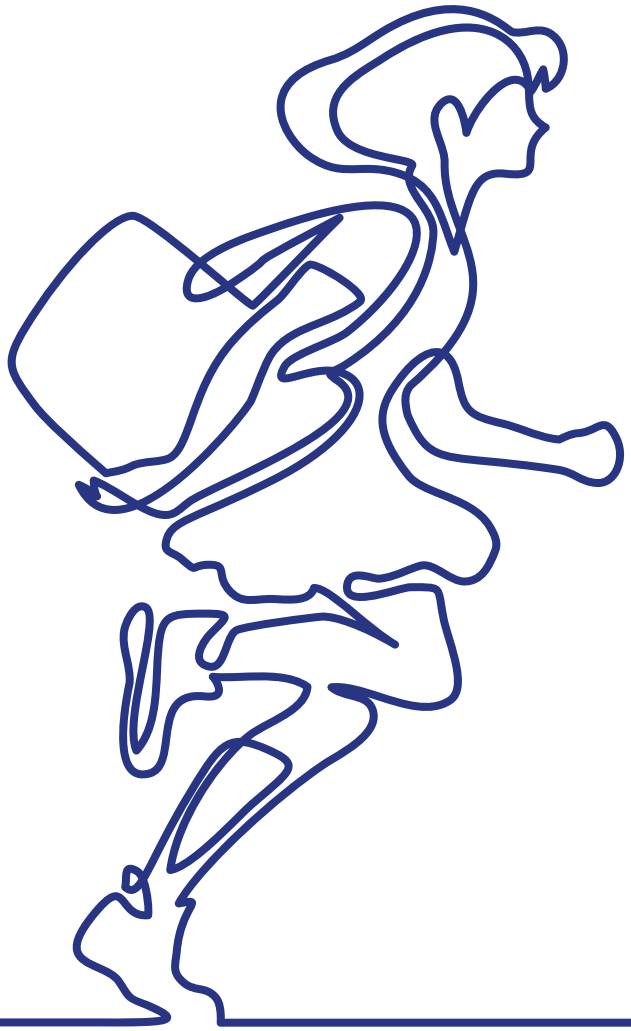
Podiatry's role in keeping children with musculoskeletal pain active



Paediatric podiatrists have a wide range of skills to successfully manage children experiencing foot and lower limb pain. Timely access to a podiatrist can ensure effective conversations about rehabilitation strategies and coping mechanisms to help children return to their activities.

Podiatrists help children's health and wellbeing

Managing pain and promoting activity ensures children lead active lives which promotes health and well-being. Foot pain is the most common musculoskeletal problem in ages 10-13 years.[1] Foot impairments and disability can persist into adulthood and it is important that more serious joint pains are spotted early, such as juvenile arthritis, where 60% of children have problems as adults .[2, 3, 4]

Paediatric podiatrists commonly see children with growing pains, walking difficulties and sports related pain, in addition to health-related conditions such as childhood arthritis,[5] prematurity[6] and neuro-developmental challenges,[7] all of which can make children less active than their healthy peers.

Ensuring access to podiatry can help children have healthy opinions, choices and habits towards exercise and activity in childhood that can transfer into adulthood and support longer term health and wellbeing.

Keeping children active has benefits for managing chronic pain, body weight and composition, cardiorespiratory fitness, cardiovascular health, bone and muscle health.

The paediatric podiatrist's role

Paediatric podiatrists focus on what is important to the child and their family; this may include helping to maintain participation in a sport they enjoy, an activity that is important to them and ensuring they are socially included in daily activities. Podiatrists will evaluate how a child's medical condition interacts with the body's form and function and in turn how this influences a child's ability to position, move and take part in activities.

Paediatric podiatrists work to a child's strengths, abilities and preferences to help improve their function, activity and participation levels, and reduce their pain. This can include working through activities that are meaningful to the child, providing advice on healthy footwear choices for activities, home exercises, training strategies to improve fitness and health, pacing or modifying activities, foot orthoses and health coaching to explore lifestyle choices. Timely access to paediatric podiatry services is essential to ensure that children get the right care at the right time.

Size of problem

- 1 in 4 children experience musculoskeletal pain[8]
- Foot pain is the most common musculoskeletal problem in ages 10-13 years[1]
- Heel pain accounts for 30% of visits to sport medicine clinics[9]
- Persistent musculoskeletal pain can lead to chronic pain in childhood and adulthood[2]
- The annual mean costs are estimated to be £8,000 per adolescent experiencing chronic pain[10]
- Musculoskeletal pain limits activity levels in a quarter of patients leading to an increase in weight[11]
- Type 2 Diabetes is increasing in children and adolescents with considerable long-term health consequences[12]

Patient Case Study

Callum is 11 years old and enjoys playing rugby with his friends. He has had heel pain for over 12 months that reduced his time on the pitch and ability to play with his friends. He was eventually referred to a podiatrist after unsuccessful attempts to treat his pain. On Callum's first visit, the paediatric podiatrist explored what was causing pain and how to manage his pain. This included a discussion about how to keep active whilst vulnerable to injury. The podiatrist agreed an individualised home programme including rehabilitation strategies. His pain was well managed within 6 weeks and he was able to fully return to sport and his friendship group.

In Callum's case, podiatry care under a specialist children's service, was able to improve his pain, activity levels, quality of life, participation, social interaction and well-being. This highlights the need to access timely and appropriate care to ensure children have the best possible outcomes.

Podiatrists are able to assess and help with a variety of acute and chronic musculoskeletal complaints. Heel pain is just one example which demonstrates the complexity of foot conditions in childhood.[13]

Service case study

Leeds Community Podiatry Service, Leeds Community NHS Healthcare Trust

Objective

To provide goal based, podiatric care to children in their local community.

How the service was established

Leeds Paediatric Podiatry Service was established in 2002, to meet the demand and complexities of the care required for children. The number of children living in Leeds was 139,024 in the 2011 census which is 18.5% of the total population. The service is led by a paediatric specialist clinical lead and staffed by podiatrists with a special interest in paediatrics.

How the service runs

The service provides assessment for children up to the age of 18. Children are seen for a variety of reasons, such as pain, being unable to take part in sport and developmental concerns associated with structure and function. The service appropriately assesses and provides measurable, goal-based care. The clinics are involved in the treatment of painful and functional concerns, for example, associated with juvenile idiopathic arthritis musculoskeletal pain and bony irregularities. Other presentations are complicated with movement and or behavioural issues such as developmental coordination disorder or delay, genetic anomalies, those on the autistic spectrum and sensory processing disorders.

Measuring impact

The service measures the outcome of care based on the World Health Organisations, International Classification of Function and Disability and focuses on a child's level of impairment, ability to perform activities, participation and well-being. The outcomes establish that podiatry is able to help children with a range of health challenges. For the majority of children, the service is able to offer interventions independent of other services' and for a wide range of presentations.

The outcome measure domains reflect that children's lower limb presentations are not homogeneous in that not all can be improved, and some may maintain whilst some may deteriorate independent of intervention.

The service is able to improve 71% of children's impairments and activities and maintain 21%; this aspect includes management of structure, body function and pain. The service is able to improve children's participation levels by 50% and maintain 43%; this includes them attending school, taking part in family activities and playing sports. The service is able to help improve 65% of children's well-being and maintain 21%; this includes distress levels, embarrassment of a condition and parental or family worry.

The service works closely with the multidisciplinary team to help achieve improved outcomes for the approximate 10% of children who are challenged in particular domains, this includes the support of occupational therapists, paediatricians, child and adolescent mental health service, orthopaedics, rheumatology and the pain team.

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