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The role of podiatry in tackling musculoskeletal disorders and associated complications



Key points

- Foot pain affects 20% of the population.
- 10% of people report foot pain as disabling, with reduced quality of life.
- Osteoarthritis is the most common cause of foot pain, yet only 50% of those affected seek help.
- Podiatrists are ideally placed to lead the foot and ankle pathway and prevent unnecessary surgical interventions, by managing foot pain conservatively in a local setting.
- Specialist podiatrists within broader musculoskeletal pathways such as rheumatology, orthopaedics, neurology and paediatrics manage complex foot and ankle conditions effectively, which can provide cost savings.

Introduction

Musculoskeletal disorders affect bones, joints and muscles, and include pain syndromes and rarer conditions of the immune system.¹ Musculoskeletal conditions are often multifaceted or combined with secondary conditions involving neurological, cutaneous and subcutaneous, infective and immune and vascular components alongside mechanical.² These complex conditions require specialist assessment to determine the root causes. The prevalence of musculoskeletal disorders is increasing and influenced by three main factors: an ageing population, rising levels of obesity and physical inactivity.¹

Accessing the right clinician at the right time ensures that people have the best opportunity of appropriate interventions, treatments, self-management advice and rehabilitation.

Podiatrists assess, diagnose and offer early and ongoing treatments for musculoskeletal disorders affecting the foot, ankle and lower limb. It is important that people experiencing foot ankle and lower-limb pain can quickly and easily access a podiatrist for assessment, diagnosis, treatment and rehabilitation.

Podiatric management of foot, ankle and lower-limb musculoskeletal pain

Podiatrists are experts in all aspects of foot and lower-limb function and health. They are highly skilled, with a minimum science Honours degree, healthcare professionals who assess, diagnose, treat, rehabilitate and prevent abnormalities of the feet, ankles and lower limbs. They also prevent, manage and treat foot pain, deformity and infection and aim to keep people of all ages as mobile and active as possible.

Podiatric management of foot and ankle pain can include single or multiple treatments such as exercise therapy, footwear advice, advice on activity pacing, management of work commitments, and provision of orthotic devices. Research has shown that accelerated innovation in footwear and

orthotic foot devices can increase mobility, independence and quality of life for patients.³ In addition, foot pain is a major risk factor for falls; it increases the risk of falling by 62%.⁴ With podiatrists fully integrated into local falls teams, they are ideally placed not only to treat foot pain but also to prevent the associated risk factors that can lead to a fall.

Management of foot and ankle pain involves a broader appreciation of public health factors. Both physical inactivity and obesity can be influenced to improve lifestyle and reduce the risk of further musculoskeletal problems and improve the prognosis of foot and ankle pain and other non-communicable health conditions. If not addressed rapidly enough, these musculoskeletal problems may be progressive, lead to long-term pain, and may ultimately require surgery. Podiatrists offer early interventions that may include referral to activity programmes, local lifestyle improvement programmes and encouraging social prescribing, in addition to health coaching.

Podiatrists as first point of contact practitioners for musculoskeletal pain

The British Medical Association noted that musculoskeletal conditions alone are estimated to account for 20-30% of GP consultations. Studies have shown that around 8% of these presentations concern foot and ankle pain.⁵ GPs however may not be the most appropriate route for patients with such complaints; junior doctors indicated that the majority (64%) had never been trained to examine the foot, and only 13% felt competent doing so.⁵

Many patients who present to their GP with foot and/or ankle pain are referred onto orthopaedic services in secondary care. However, a referral directly to musculoskeletal specialist podiatrists, who are highly skilled in dealing with complex musculoskeletal disorders affecting the foot and ankle, would be more appropriate. It is vital that those with musculoskeletal complaints concerning the foot and lower limb can access treatment in a timely manner to improve quality of life and prevent work-related absence. To ensure patients can rapidly access the appropriate clinician there is a need for clear pathways to be in place to allow patients ease of access to podiatry services for musculoskeletal pain, gait analysis and management of sports injuries.

Specialist services

In many NHS Trusts and Boards, podiatrists are working in Musculoskeletal Assessment and Treatment Services (MCATS).

The MCAT service provides a one-stop clinic for the assessment and treatment of a wide variety of musculoskeletal conditions. Patients are triaged by podiatrists who are part of the wider team including rheumatologists, GPs with a special interest, musculoskeletal physicians, nurses, occupational therapists and physiotherapists. It is provided as part of an overall musculoskeletal pathway and ensures patients are treated by the right clinician at the right time, thus avoiding

unnecessary appointments, saving precious resources and freeing up capacity for the orthopaedic department.

An MCATS foot service is an extended scope, podiatry-led service offering a short episode of care that may include:

- Diagnostics
- Injection therapy
- Provision of orthotics
- Referral to foot and ankle podiatry services for intensive course of treatment or for ongoing treatment

MCAT services are effective in improving symptoms for patients and reducing the number of referrals to orthopaedics. A study identified that 72-97% of patients could be solely managed within non-secondary care settings, and also identified a reduction in the orthopaedic referral rate by up to 60%.⁶

Podiatrists working in these specialist roles in MCATS or as musculoskeletal specialists within rheumatology departments work effectively as part of a multidisciplinary team. In these posts,

podiatrists offer the full suite of musculoskeletal treatments as the majority are annotated on the national register as having training and access to medicines such as local analgesia and methylprednisolone and many are trained in injection therapy.

Regardless of underlying long-term conditions, the available research suggests that treatment of musculoskeletal disorders should begin as soon as possible to delay the progress of the disease.⁷ Diagnosis as soon as possible after the onset of symptoms, and in some cases, screening for disorders that remain asymptomatic in the early stages is vital.

Providing podiatry services in alternative settings

Podiatrists are established in the NHS, where most complete the clinical aspect of their pre-registration training. In addition, many podiatrists also have an independent private practice and regularly diagnose and treat musculoskeletal disorders. Some in the private sector are also commissioned by NHS services and provide care in a range of settings where these disorders are detected and managed, including sports centres, gyms, residential/medical care homes, supported living establishments, prisons and charity/council run day centres.

UK prevalence of some musculoskeletal conditions seen by podiatrists

Inflammatory conditions

- Over 400,000 people in the UK have rheumatoid arthritis¹
- 12,000 children have juvenile idiopathic arthritis⁸
- 1.5 million people in the UK have gout¹

Conditions of musculoskeletal pain

- Over 8.75 million people aged 45 and over have sought treatment for osteoarthritis¹
- Up to 2.8 million people in the UK have fibromyalgia¹

Osteoporosis and fragility fractures

- Around 3 million people in the UK have osteoporosis¹
- Over 300,000 fragility fractures occur each year¹

Children and young people also acquire musculoskeletal disorders, some of which persist into adulthood. It is important that more serious joint pains are spotted early, such as juvenile arthritis; 60% of children suffering from juvenile arthritis suffer complications as adults.^{8–10}

Musculoskeletal disorders, work and the economy

Having a musculoskeletal disorder can be a barrier to being productive and being able to work. The impact of disability on the individual affected, their families, and on the health and social care system is considerable. For the individual, the pain and disability of poor musculoskeletal health can limit independence and reduce participation in social and working life, which may then have an impact on self-esteem, further affecting their mental health. Musculoskeletal disorders range from acute symptoms (such as aches and pains in joints and soft tissues) to more chronic conditions (such as osteoarthritis and rheumatoid arthritis), which require medical treatment and can lead to sickness absence. The more chronic form of musculoskeletal disorders can lead to disability, resulting in permanent loss of work.

59.4%¹¹ of the working population suffers with some form of musculoskeletal disorder. The Office for National Statistics estimates musculoskeletal disorders to be the second biggest cause of sickness absence, resulting in 30.8 million days lost each year.¹² Musculoskeletal disorders are also found to be the major reason for early ill-health related retirement within the NHS.¹³ The NHS in England spends £5 billion each year on treating musculoskeletal disorders. Musculoskeletal conditions account for the 3rd largest area of NHS programme spending at £4.7bn.¹⁴

Aside from the personal cost of musculoskeletal disorders, the cost to the state makes it vital that people receive support from the right intervention from the right healthcare professional at the right time; to help them alleviate or reduce their symptoms, and to receive advice and treatment about how to manage their condition most effectively.

Conclusion

Musculoskeletal disorders, in isolation or as part of a systemic health condition, affect a large section of the UK population. Older people are especially at risk of developing musculoskeletal complications, but they can affect people of any age, from all walks of life, who have differing levels of physical activity.

Musculoskeletal disorders can negatively impact on people's quality of life and ability to work. This includes experiencing pain as well as a reduction in mobility. Furthermore, musculoskeletal disorders are a strain on resources, whether this is the cost of treating problems in primary and latterly secondary care or in the number of working days which are lost each year.

Musculoskeletal conditions can be treated if people are able to access the right care from the right person at the right time. Podiatrists detect, diagnose and treat a wide range of musculoskeletal disorders and are central to reducing the health burden of musculoskeletal disorders in the lower limb.

To enable podiatrists to make a full contribution to improving the musculoskeletal health of the nation, rapid access to podiatry services is essential. This can be achieved through appropriate investment in services, savings to the health and social care system can be realised by tackling musculoskeletal disorders early, thereby reducing secondary care referrals and keeping people mobile and in work.

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