MUSCULOSKELETAL MATTERS
Arthritis Research UK | primary care centre
Bulletin 13
Keele UNIVERSITY

The neglected joints: feet

Foot osteoarthritis - An important, common but neglected cause of disability

Osteoarthritis (OA) is known to affect the knees, hips, and hands. What is less well known is that the foot is also a common site for OA.

How common is foot OA?

In a survey of over 5,000 adults aged 50 and over, we found that 1-in-6 people in this age-group have painful, radiographically-confirmed OA of the foot. The most commonly affected joint was the big toe joint (1st Metatarsophalangeal Joint [MTPJ]), although painful OA in the middle of the foot was also common.

Why is this important?

More than three-quarters of people with this condition reported foot symptoms that significantly interfered with their everyday life.

Presentation of foot OA

People with foot OA commonly report pain and stiffness in the affected joint(s) and may have difficulty walking. Bony overgrowth (exostoses) may be visible on the outside of the foot.

Broadly, two patterns of foot OA have been identified

- OA affecting the 1st MTPJ
- OA affecting multiple joints in the midfoot

Diagnosis

1st MTPJ OA can be diagnosed clinically, by observing the presence of osteophytes (bony spurs along a joint margin), a reduced range of motion, crepitus and a 'bony block' when moving the joint.

Midfoot OA may be more difficult to identify, and an X-ray may be required, but is a likely cause of pain in people aged 50 and over who present with pain in the midfoot/arch region.

Osteophytes and joint space narrowing can be readily observed with plain film x-rays (see Figures 1 and 2).

Figure 1. Radiographic (x-ray) appearance of OA affecting the 1st MTPJ (arrowed).

Figure 2. Radiographic (x-ray) appearance of OA affecting the midfoot (talonavicular joint, arrowed).

Who is most likely to develop foot OA?

Foot OA is strongly associated with age, is more common in women than men, and is associated with lower socioeconomic class. Midfoot OA is also more common in obese individuals and those who have reported a previous injury to the foot.

Consultation and self-management of foot OA

People with foot OA commonly seek medical care for their condition, although access to appropriate treatments may be less than ideal. In people with foot OA, fewer than half had seen a podiatrist over a 12 month period. The most common form of self-management was paracetamol (see Figure 3).

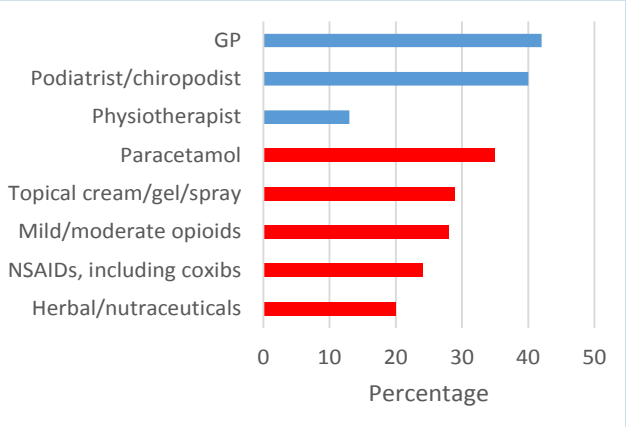

Figure 3. Self-reported health care use and pain medication in people with foot OA.

Treatment for foot OA

Very few trials have been conducted to evaluate the effectiveness of treatment for foot OA. In clinical practice, painful foot OA may be managed with:

- paracetamol
- non-steroidal anti-inflammatory drugs (topical, oral)
- steroid injections into the 1st MTPJ or midfoot joints can also be effective

Recent studies have suggested that **insoles** (foot orthoses) are effective at reducing pain in people with 1st MTPJ or midfoot OA, and that shoes with a **curved ('rocker') sole** are effective in people with 1st MTPJ OA. Referral to podiatry services for assessment and treatment is therefore recommended.

If conservative measures fail, **surgical intervention** may be needed. This may involve removal of the bone growths or joint fusion. For OA of the 1st MTPJ, joint replacement may be effective.

KEY MESSAGES

For Patients

- Seek advice if foot symptoms are troublesome or disabling: there are potentially effective treatments

For Clinicians

- Foot OA affects 1-in-6 people aged over 50 and is frequently disabling
- OA should be considered as a possible cause of chronic foot pain in older people presenting in primary care
- Although the 1st MTPJ is the most commonly affected site in the foot, OA is a likely cause of pain in the midfoot/arch in people aged 50 years and over
- Referral to podiatry services for foot orthoses or specialist footwear should be considered

For Healthcare Service Commissioners

- Foot OA is a common problem, causing a lot of potentially preventable disability in the community, and it may be under-treated
- Adequate access to podiatry and other services which can assess for potentially effective treatments should be ensured

See more at: keele.ac.uk/mskmatters

References

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