Ten top tips - foot and ankle pain

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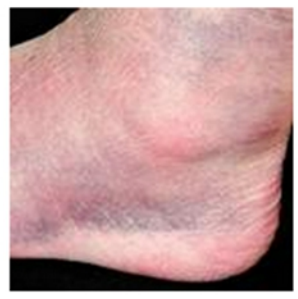
Mr David Gordon, consultant foot and ankle surgeon, shares his tips for assessing foot and ankle pain in primary care



1. Think spine as an alternative source of foot and ankle pain

Always ask about sciatic pain, which radiates from the buttock to the plantar or lateral foot. Ask about current or previous lumbar spine problems or pain down the back of the leg. The sciatic stretch test may differentiate the source of pain. With the patient supine, lift the leg as high as is comfortable, keeping the knee straight and see if this increases the foot (or leg) pain. By dorsiflexing the ankle upward, this increases sciatic nerve tension and can increase the pain to the foot – a sign that the pain is from a lumbar nerve root.

2. Ask the patient to stand and look at both feet

This is useful to assess subtle toe deformities, of which the second toe is most commonly affected. In a non-weight bearing position, the foot and ankle shape will change and may not reveal the problem, so ask the patient to take shoes and socks off and stand in front of you.

3. Ask yourself where is the pain and where does it go?

These questions help differentiate between Morton's neuroma and metatarso-phalangeal joint (MTPJ) synovitis. Morton's neuroma is pain felt on the plantar aspect of the foot and may feel like walking on a small stone. The common digital nerve to a web space (usually toes three and four) is compressed, and the pain will radiate into these toes. More localised pain on the top (dorsum) of the foot, with tenderness under the MTPJ that does not radiate to the toes, is more likely to be a synovitis, especially if there is a deformity (usually the second toe).

4. Check the patient's shoes

Squeezing the foot into a narrow space will increase pressure on a bunion (hallux valgus), close down the space for a nerve (Morton's neuroma) and rub on a bone spur secondary to big toe joint arthritis (hallux rigidus). High heels will increase plantar forefoot pressure and will make both MTPJ synovitis and Morton's neuroma worse.

5. Ask about pain on the first step of the day

Pain and stiffness after inactivity, usually after waking up, are the hallmarks of plantar fasciitis and Achilles tendinopathy. During sleep, musculoskeletal structures shorten – the first movements after waking up force the tendons and fascia to stretch and this can be painful. After a few minutes, the pain and stiffness tend to ease off.

6. If a radiology report identifies 'calcaneal spurs', don't be misled

'Heel spurs' are probably enthesopathic changes at sites of chronic inflammation, such as the Achilles insertion and plantar fascia origin. The spurs are probably not the source of pain and do not need to be removed. Only 22% of patients withspurs have plantar fasciitis.[1]

7. Most Achilles tendon ruptures can be diagnosed on history alone

Patients usually report a non-contact sporting injury, where a sudden onset of pain at the Achilles tendon occurs after pushing off with the foot. For examination, lay the patient prone with both legs exposed from the knee to toes. Have the feet off the edge of the couch. The calf squeeze test is diagnostic, where squeezing the affected calf has no effect on foot movement. Achilles tendon ruptures should be treated within seven days.

8. Gradual onset of Achilles pain is likely to be a tendinopathy

This is pain at the mid-portion or insertion of the Achilles tendon, which is worse on activities such as running and associated with stiffness after inactivity. Examination will reveal a tender Achilles and if the pain is more longstanding, a palpable tender lump in the tendon. Referral to a physiotherapist for stretches off a step is the first-line management. This takes many months to settle.

9. With ankle sprains, take a good history and don't dismiss symptoms, as they may not settle

Anterolateral ankle pain and instability (giving way) may occur at one year in 5-33% of patients who have had a previous lateral ligament ankle sprain.[2] Recurrent giving way due to stretched ligaments should have three months of dedicated physiotherapy prior to considering surgical reconstruction. Consider fitting a brace. Persistent anterolateral pain and tenderness without instability may be due to an impingement lesion (scar tissue within the joint) and may not respond to physiotherapy but require arthroscopic debridement.

10. Don't forget to assess for calf muscle tightness

A tight gastrocnemius muscle has been implicated as the cause of a range of disorders, including plantar fasciitis, Morton's neuroma and metatarsalgia. Check tightness by examining the difference in ankle dorsiflexion with the knee straight and bent. If the gastrocnemius is tight in the presence of an associated condition, it should be stretched out.

Mr David Gordon is a consultant foot and ankle surgeon at Spire Bushey Hospital and Luton & Dunstable University Hospital

References

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