Freiberg's disease

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DESCRIPTION

A healthy, 21-year-old man presented with a 1-year history of persistent right forefoot pain. Swelling, tenderness and restricted motion of the second metatarsophalangeal (MTP) joint were evident, especially during dorsiflexion; a positive Lachman test suggested MTP joint instability. A right foot X-ray showed a flattened and sclerotic second metatarsal head as well as joint surface irregularity (figure 1). The evident metatarsal head osteochondrosis was consistent with Freiberg's disease, which is most common in adolescent females and is typically caused by repetitive second metatarsal head stress.¹ Restricted second metatarsal base

Learning points

- ▶ Generally, patients with Freiberg's disease present to the emergency department with atraumatic foot pain.
- ▶ Early recognition and appropriate treatment provide sufficient functional prognosis.

motion may increase distal metatarsal head stress or compromise blood flow to the metatarsal head, both potentially leading to metatarsal head osteochondrosis.² Clinically, most patients present with pain during weight-bearing, swelling and tenderness; thus, most need treatment.³ Two months after osteochondral autograft transplantation, this patient was asymptomatic.

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REFERENCES

- 1 Love JN, O'Mara S. Freiberg's disease in the emergency department. *J Emerg Med* 2010;38:e23–5.
- 2 Carmont MR, Rees RJ, Blundell CM. Current concepts review: Freiberg's disease. *Foot Ankle Int* 2009;30:167–76.
- 3 Miyamoto W, Takao M, Uchio Y, et al. Late-stage Freiberg disease treated by osteochondral plug transplantation: a case series. *Foot Ankle Int* 2008;29:950–5.

Figure 1 Anteroposterior and oblique views of the metatarsophalangeal joint show that the second metatarsal head was flattened (arrow).

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