Diagnosis and Treatment of First Metatarsophalangeal Joint Disorders. Section 6: Other Disorders

Clinical Practice Guideline First Metatarsophalangeal Joint Disorders Panel: John V. Vanore, DPM,1 Jeffrey C. Christensen, DPM,2 Steven R. Kravitz, DPM,3 John M. Schuberth, DPM,4 James L. Thomas, DPM,5 Lowell Scott Weil, DPM,6 Howard J. Zlotoff, DPM,7 and Susan D. Couture8

This clinical practice guideline (CPG) is based upon consensus of current clinical practice and review of the clinical literature. The guideline was developed by the Clinical Practice Guideline First Metatarsophalangeal (MTP) Joint Disorders Panel of the American College of Foot and Ankle Surgeons. The guideline and references annotate each node of the corresponding pathways.

Other Disorders of the First MTP Joint (Pathway 7)

Many additional, although less common, disorders exist that may produce first MTP joint pathology (Fig. 1). These include various arthritides (1), especially gouty arthritis (2–5). Other causes include infection (6,7), tumors (osseous or soft tissue) (8–10), vascular and neurologic abnormalities (11–13), and the complex pathologies associated with the diabetic foot (14).

Significant History (Node 1)

Patients may present with acute or chronic joint pain. A complete medical history is indicated to rule out systemic disorders (eg, diabetes or past gout attacks).

Significant Findings (Node 2)

Edema, discoloration, and/or increased warmth may be present. Other joints may also be affected. Localized pain with weightbearing or on range of motion may be seen, as well as the presence of a soft-tissue mass or an abnormal topography.

FIGURE 1 Radiographic evaluation is often useful in the diagnosis of a variety of other first MTP joint disorders. These may include a diverse group of acute to chronic pathology, including (A) avascular necrosis, (B) gout, (C) neuropathic arthropathy, and (D) osteomyelitis.

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Radiographic Examination

Radiographic examination should be undertaken as a general diagnostic tool (1) (Fig. 1).

*Radiographs: positive radiographic findings (Node 3).* These may include joint erosions, fragmentation, or tumor. Soft tissue swelling or a mass may be identified. A working diagnosis should be established and proper treatment and/or referral initiated.

*Radiographs: negative radiographic findings (Node 4).* If radiographs are negative, further evaluation is indicated.

Laboratory testing and further imaging studies such as technetium scan, magnetic resonance imaging, and computed tomography may be considered. Once a diagnosis is established, treatment and/or proper referral may be considered.

**Summary**

Systemic, metabolic, and other unusual pathologies may occur and need to be considered in the patient who presents with first MTP joint symptoms.
References