

Gout Flare With a Draining Tophus

Adam B. Wallace, MS III

William Johnson, DO

From the Sidney Kimmel Medical College at Thomas Jefferson University in Philadelphia, Pennsylvania (Student Doctor Wallace), and the Lankenau Medical Center in Wynnewood, Pennsylvania (Dr Johnson).

Financial Disclosures:
None reported.

Support: None reported.

Address correspondence to
Adam B. Wallace, MS III,
248 S 11th St, Apt 1,
Philadelphia, PA 19107-6745.

E-mail:
adam.wallace@jefferson.edu

Submitted
October 27, 2015;
revision received
November 17, 2015; accepted
November 23, 2015.

A 90-year-old woman with a history of stage-3 chronic kidney disease, hypertension, and gout presented with chills and severe pain in the first toe on the left foot. Physical examination revealed large, firm nodules bilaterally on her metatarsophalangeal joints. The metatarsophalangeal joint on the left foot was abraded and draining a chalky white substance (panel A). Plain radiographs and magnetic resonance images were consistent with tophaceous gout and acute osteomyelitis (panel B). A blood culture was positive for methicillin-sensitive *Staphylococcus aureus*. The patient had no other stigmata of endocarditis, and echocardiography results showed no vegetations. The patient underwent partial first ray amputation on the left foot. Histologic findings confirmed the diagnosis of chronic tophaceous gout complicated by acute osteomyelitis. Her surgical margins were clear of infection. Intravenous antibiotics were administered, and she was discharged to home 3 days after the operation.

Chronic tophaceous gout is rarely encountered in modern medicine. Complications include bone

destruction, joint deformities, and, as in the present case, secondary infections. Diagnosis can be made on clinical grounds and confirmed with the visualization of uric acid crystals under light microscopy. The American College of Rheumatology recommends urate-lowering therapy in all cases of tophaceous gout. (doi:10.7556/jaoa.2016.083)

Acknowledgment

We thank Ryan C. Miller, DO, for his assistance with radiologic imaging.

Suggested Reading

1. Khanna D, Fitzgerald JD, Khanna PP, et al. 2012 American College of Rheumatology guidelines for management of gout, part 1: systematic nonpharmacologic and pharmacologic therapeutic approaches to hyperuricemia. *Arthritis Care Res (Hoboken)*. 2012;64(10):1431-1446. doi:10.1002/acr.21772.
2. Khanna D, Khanna PP, Fitzgerald JD, et al. 2012 American College of Rheumatology guidelines for management of gout, part 2: therapy and antiinflammatory prophylaxis of acute gouty arthritis. *Arthritis Care Res (Hoboken)*. 2012;64(10):1447-1461. doi:10.1002/acr.21773.

© 2016 American Osteopathic Association

