Severe tophaceous gout is associated with renal impairment, alcohol, obesity, diet, hypertension, family history, and low socioeconomic status\(^1\,^2\). Treatment failure is estimated in about 1% to 1.5% of cases of gout in the United States\(^3\).

Our patient was a 60-year-old male with gouty arthritis for 15 years and chronic renal failure for 6 years. He described irregular usage of colchicine and urate-lowering drug for the last 15 years due to noncompliance with therapy. He used neither diuretics nor other prohyperuricemic drugs. Family history was nonsignificant for gout. On physical examination, he had massive and deforming tophi and active synovitis of bilateral small joints of the hands, wrists, elbows, knees, ankles, and ears (Figure 1). There were ulcerated lesions over the tophi in both ankles (Figure 2).

Laboratory data were as follows: uric acid, 8.1 mg/dl; C-reactive protein (CRP): 7.5 mg/dl; creatinine, 1.4 mg/dl; radiographs of hands revealed erosions (Figure 3). Cultures from ulcerated lesions yielded no growth. The patient was confined to a wheelchair because of his severe arthritis. He could not tolerate colchicine because of severe diarrhea and did not want to use steroids. Therefore, the patient was started on interleukin-1 antagonist (anakinra) 100 mg/day subcutaneously. At the end of the first week of therapy, his synovitis regressed significantly and he was able to walk without any support. Because his uric acid level was still high (7.8 mg/dl) with allopurinol (up to 450 mg/day for 3 mos), he was given febuxostat 40 mg/day.

After 4 months of therapy with anakinra and febuxostat, he had no active synovitis. He was able to get out of the wheelchair and his CRP (0.4 mg/dl) and uric acid (4.2 mg/dl, the target is < 5 mg/dl) levels were normal. In addition, the ulcerated lesions improved, probably owing to control of the inflammation.

REFERENCES


Figure 1. Multiple massive and deforming tophi of the hands.
Figure 2. An ulcerated lesion over the ankle and tophi on feet.

Figure 3. Radiographs of the hands showed classic punched-out erosions with overhanging edges, and calcification of tophaceous deposits.