

A rare case of diabetic foot ulcer - ulcerated gout, a diagnostic challenge.

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Introduction: Gout, once described as the malady of kings has made a significant resurgence in recent years affecting people with type 2 diabetes, hyperuricemia, hypertension and chronic kidney disease. Ulcerated gout is uncommon and superimposed on a non healing diabetic foot ulcer may present a diagnostic challenge. **Case:** A 71 year old gentleman with type 2 diabetes, hypertension, and hyperuricemia was referred to the foot clinic with existing ulceration on the medial aspect of his right first metatarsophalangeal (MTP) joint of 4 months duration. His glycaemic control showed an HbA1c of 7.7% and serum urate 694 (range: 200-430) $\mu\text{mol/l}$. Swabs revealed staphylococcus aureus, β haemolytic streptococcus and he was treated with oral antibiotics for 6 weeks. Allopurinol was re-instituted with strict control of hyperglycaemia, blood pressure and hyperlipidaemia. X-ray of the right foot showed extensive soft tissue swelling around the great toe with widespread destruction of the distal shaft of the first metatarsal, first MTP joint and proximal phalanx of the great toe. MRI revealed a large well-defined heterogeneous soft tissue mass surrounding the first metatarsal shaft crossing the first MTP joint with gross bony destruction and a few foci of calcification. CT scan showed circumferential bone erosion and soft tissue mass measuring 3.6 x 4.7 cm suggestive of a tophaceous deposit around 1st MTP joint. Surgical debridement of the ulcer and joint fluid aspiration revealed negatively birefringent crystals in keeping with co-existent gouty arthritis. 4 weeks later, although there was near resolution of the ulcerated area, the patient presented yet again with a painful swollen foot and examination revealed tiny punched out ulcers on the base of the great toe and mid-foot. Both ulcers probed to bone and were interconnected. Radical surgical debridement with complete removal of the tophaceous mass was carried out and 2 months post surgery, there was complete wound healing with serum urate levels receding to 481 $\mu\text{mol/l}$. **Discussion:** This case represents an unusual presentation of gout affecting the proximal foot with underlying soft tissue mass and bony destruction mimicking osteomyelitis in a patient with a non healing diabetic foot ulcer. Surgical treatment in ulcerated gout is usually reserved for recurrent ulcerations, infection and joint destruction. Tissue sampling, imaging modalities alongside aggressive medical treatment are useful strategies in ulcer management and to aid prompt healing.