PCR 4

Two toes - two diseases?

T Jemmott, D Elias, NL Petrova, ME Edmonds
Diabetic Foot Clinic and Department of Clinical Radiology, King's College Hospital, London, UK

We report a 65 year old male patient with longstanding type 1 diabetes of 43 years duration and peripheral neuropathy presenting to our Diabetic Foot Clinic with an infected ulcer of the 2nd right toe which was red, hot and swollen with purulent discharge. The head of the 2nd proximal phalanx was exposed. The patient was admitted and treated with i.v. Vancomycin and Doxycyline, as a swab taken at the GP surgery had shown MRSA. Initially there was an improvement in the 2nd toe, but from day 6, pain and redness of the foot increased and C-reactive protein (CRP) was 43 mg/l. Antibiotics were changed to i.v. Gentamycin and Fucidin but the CRP continued to rise and reached 91 mg/l at day 11. The patient underwent podiatric debridement of the exposed end of the proximal phalanx. At day 11, the antibiotics were changed to Rifampicin and Ciprofloxacin. Although the 2nd toe improved, the foot remained hot, swollen and painful. A three phase technetium diphosphonate bone scan was ordered to determine if there had been any spread of the infection from the 2nd toe. The bone scan revealed an increased isotope uptake in the right 2nd toe associated with the bone destruction from the infection but un-expectedly markedly increased activity in the right 1st metatarso-phalangeal joint. An MRI scan showed juxta-articular erosions and oedema in the first metatarsal head and adjacent sesamoids, which suggested the presence of gout. X-ray also showed erosive changes of the 1st metatarsal head which were not present on admission. The patient was treated with appropriate analgesia and discomfort in his foot gradually resolved. The right 2nd toe also continued to improve and the ulcer healed. Interestingly, serum levels of uric acid were normal but this does not rule out the diagnosis of gout in which the uric acid can sometimes be normal.

Thus in **summary,** this patient presented with infection of the 2nd toe which precipitated an episode of gout in the right 1st metarsal-phalangeal joint and was responsible for the pain and swelling in his foot whilst the infection in his 2nd toe was improving.

When patients present with digital infection, but the foot remains hot and swollen despite the successful treatment of the digital infection, then gout should be considered as a possible cause and may be diagnosed by appropriate imaging of the foot.