Case of the month February 2013

43-year-old man with pain, swelling and tenderness of the foot.

An X-Ray of the foot was done.

• What are the imaging findings?
• What is the differential diagnosis? Diagnosis?
Imaging Findings

- On the radiograph, radiolucent areas are seen at the head of the second metatarsal and the base of the proximal phalanx of the second toe.
Differential Diagnosis

- Stress fracture
- Destructive osteoarthritis
- Osteomyelitis
- Psoriatic arthritis
- Freiberg’s infarction (AVN)
Diagnosis

• Osteomyelitis
Discussion

• Almost all represent contiguous infections from skin ulcerations or postoperative defects.

• Radiographic evidence of bone destruction by osteomyelitis may not appear until approximately 2 weeks after onset of infection.

• Radiographs may reveal osteolysis, periosteal reaction, and sequestra (segments of necrotic bone separated from living bone by granulation tissue).
Discussion

- A bone abscess (Brodie's abscess) is visualized during the subacute or chronic stage of hematogenous osteomyelitis.

- Radiographs may demonstrate gas in the soft tissue as well.
References


• Case submitted by Abdullah Alabousi