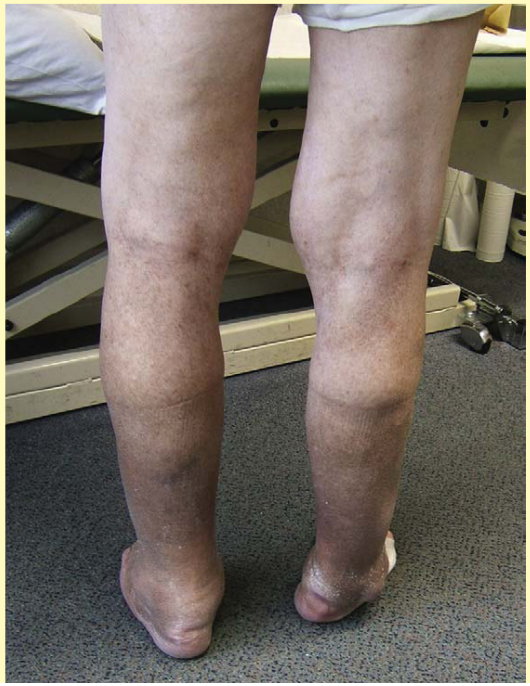
Case 7

This patient, before ankle and knee surgery, complained of more pain in his arthritic right ankle than in his valgus, arthritic right knee. He had an ankle fusion initially, but complained of difficulty walking after his right total knee replacement 3 years later. What has happened and what will you do now?

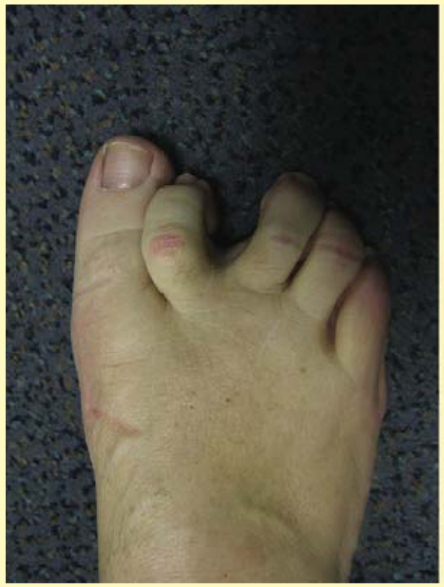


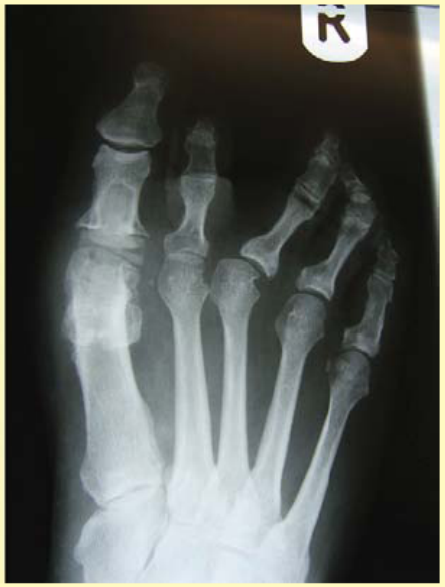
Answer 7

In principle it is preferable to align the leg proximally before performing a distal arthrodesis. The ankle was fused with respect to the limb alignment initially, but knee valgus was subsequently corrected at knee replacement leaving the ankle in varus with respect to limb alignment. It would have been better for him to have had a knee replacement before the ankle arthrodesis, even if his ankle was more symptomatic than his knee. He now needs long leg films to assess the deformity and will then need a corrective osteotomy at the site of the ankle fusion.

Case 8

This 60-year-old lady underwent a silastic joint replacement of her great toe 4 years ago. Two years ago she developed pain and swelling around the base of her second toe and her orthopaedic surgeon injected her with steroids, suspecting a Morton's neuroma. The pain reduced but she was left with a stiff claw deformity of her second toe. She now presents with pain at the base of her third toe. What is the diagnosis and what treatment would you advise?





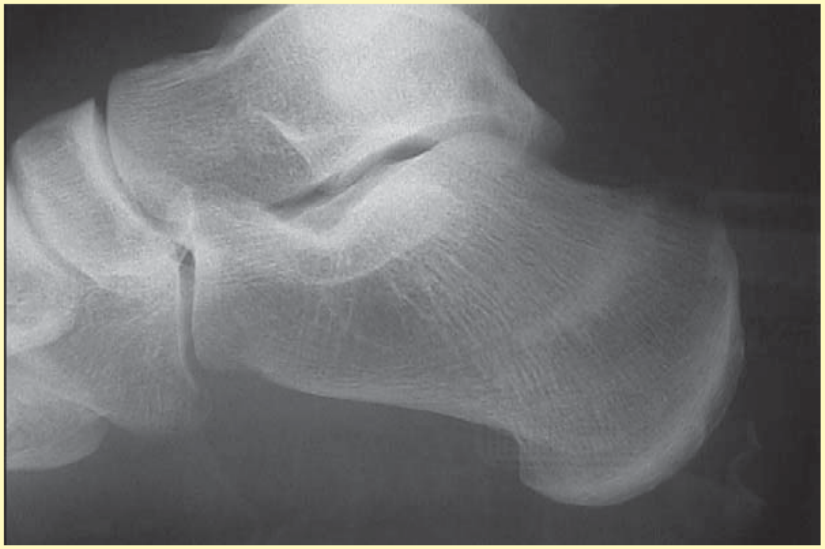
Answer 8

The bone resection during hemiarthroplasty of the great toe led to detachment of the flexor hallucis brevis insertions. The sesamoids (on which one usually weightbears) retracted proximally and led to overloading of the second metatarso-phalangeal joint (MTPJ). This led to synovitis and inflammation of the plantar plate of the second MTPJ 2 years later and the surgeon misdiagnosed this as a Morton's neuroma. The plantar plate ruptured, giving pain relief at the base of the second toe, but the patient developed a claw toe and a subluxed second MTPJ. She is now suffering from capsulitis of the third MTPJ with the classical widening between the toes known as the daylight sign, peace sign or V sign. Untreated, her third MTPJ will sublux.

She was treated by Weil osteotomies of the second and third MTPJs and her great toe was stabilized by means of removal of the implant followed by fusion with iliac crest bone graft.

Case 9

This 65-year old patient has a 3-week history of inferior heel pain, worse whilst walking. The heel is not tender inferiorly but there is pain on squeezing from side-to-side. What is the diagnosis?

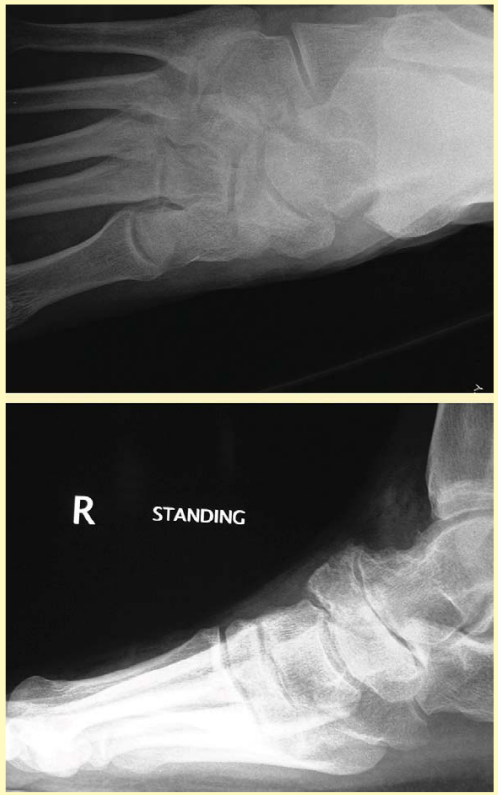


Answer 9

She does not describe the typical early morning tenderness of plantar fasciitis. The radiograph confirms the clinical diagnosis of a stress fracture by demonstrating the typical line of increased density in the body of the os calcis. She was rested in a cast for 4 weeks. Enquiries should be made in all patients with a stress fracture in an attempt to identify the cause: either bone insufficiency leading to fracture or fatigue fractures in normal bone. Her bone density scan showed evidence of osteopaenia and she was advised to stop power walking on concrete surfaces.

Case 10

A 30-year-old man had increasing pain over the dorsum of the foot and had not responded physiotherapy for a presumed tibialis anterior tendonitis. What is the diagnosis?

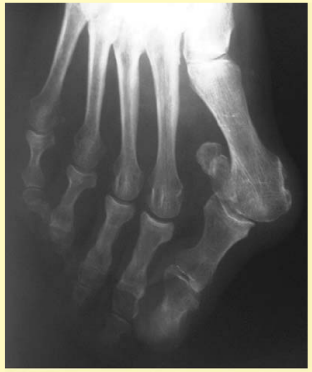


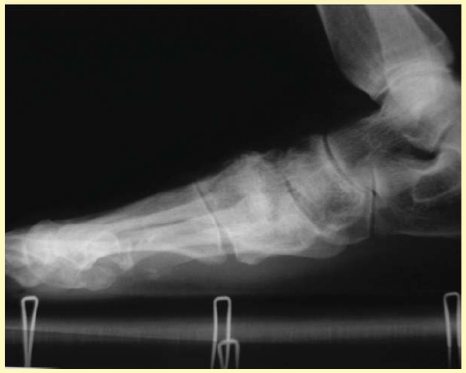
Answer 10

The radiographs show the typical features of Muller–Weiss disease, a condition that was also described by Brailsford. It is a developmental abnormality in which there is failure of growth in the lateral part of the navicular, which becomes narrower and may extrude dorsally. The pain is usually due to secondary osteoarthritis. Initial pain relief is obtained by orthoses and local steroid injections; talo-navicular and navico-cuneiform fusions may be necessary at a later stage.

Case 11

This 51-year-old lady presents with a painful bunion and some midfoot pain. What treatment would you offer her?





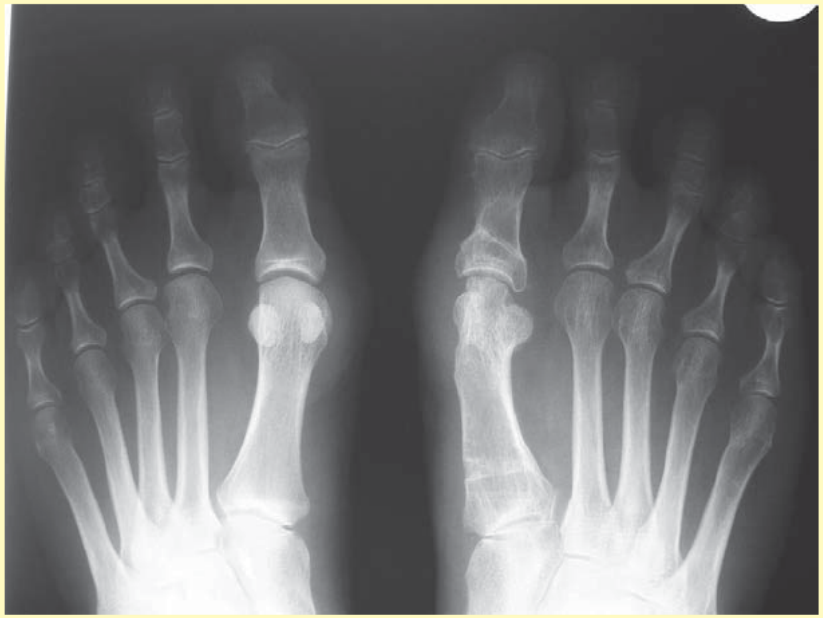
Answer 11

Weightbearing dorsoplantar and lateral radiographs of the whole foot should be performed in all patients with a hallux valgus. The DP radiographs were centred on the forefoot only and did not show the midfoot. The weightbearing radiographs on the other hand demonstrate the instability of the first metatarsal (note the inferior opening of the first metatarso-cuneiform joint) and the arthritic changes at the second tarso-metatarsal joint (note the loss of joint space and sclerosis).

A metatarsal osteotomy would not have dealt with either problem; she underwent an arthrodesis of the first and second tarso-metatarsal joints with excellent relief of symptoms.

Case 12

This 35-year-old patient had persistent pain after a basal osteotomy and Akin osteotomy for correction of hallux valgus 1 year ago. The pain persisted after removal of the metalwork 6 months later and she reports sharp pain under her medial sesamoid. Can you identify the causes of her persistent pain? What investigations might help?



Answer 12

She has undergone an excessive bunion resection at the time of surgery 1 year ago. In the vast majority of cases, a bunion is not due to an exostosis but is due to prominence of the normal medial eminence of the first metatarsal head: an excessive ''bunionectomy'' therefore removes normal bone and the axial radiograph below shows that this has resulted in point loading of the medial sesamoid and she has, as a consequence, developed arthritic changes in her metatarsophalangeal joint (joint space narrowing, sclerosis and osteophyte). She did not have any arthritis prior to her initial surgery. A minimal resection of the medial eminence should be carried out at the time of hallux valgus correction and there is no role for a so-called ''bunionectomy'' operation.