

# Complications of bone and joint sepsis

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Treated appropriately, most cases of sepsis resolve with no sequelae. However, significant complications can occur, particularly in terms of chronic infection and where there has been damage to the joint and/or the physis and the epiphyseal growth centres. In the neonate, vascular channels pass through the physis, connecting the metaphysis with the epiphysis, and a poorer outcome may ensue ( Figure 44.40b ). Orthopaedic follow-up should be continued until normal growth patterns are documented. Meningococcal sepsis The often debilitating, late orthopaedic sequelae of meningo coccal septicaemia are secondary to endotoxin-induced micro vascular injury and ischaemic physeal damage ( Figure 44.42 Tuberculosis Globally, tuberculosis is common. The clinical presentation is often insidious, with malaise and weight loss combined with a boggy joint swelling, muscle wasting and joint contractures. Spinal deformity and neurological symptoms are particular problems. Sir Philip Noel Panton, 1877–1950, Consultant Adviser in Pathology, Ministry of Health, UK. Francis Valentine, 1897–1957, described Panton–Valentine leukocidin as a dermo-necrotic and leukocidal toxin while working with Philip Panton at the Hale Clinical Laboratory, London, UK, in 1932. - Chronic relapsing/recurrent multifocal osteomyelitis The radiographic features suggest subacute or chronic osteo - - myelitis (or tumour) but laboratory and histopathological - findings are non-specific and cultures negative. This is an ). inflammatory ( not infective) condition. Discitis Children who refuse to weight bear and complain of back pain may have discitis. The aetiology of this condition may be infective or inflammatory but if vertebral bodies are involved, infection is assumed.

Figure 44.42 Anteroposterior leg length and alignment radiograph of an adolescent who had meningococcal septicaemia as a child. He has a right below-knee amputation. Many of his lower limb physes are not growing well so he has deformity of his remaining right proximal tibia, a short left tibia and an overgrown /f\_i bula. His right femur is also short.

Brodie's abscess Chronic infections may present with radiographic features of a sclerotic walled cyst.

Figure 44.43 Anteroposterior radiograph of a knee showing meta physeal corner fractures that are considered to be pathognomonic of non-accidental injury.

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Figure 44.43 Anteroposterior radiograph of a knee showing metaphyseal corner fractures that are considered to be pathognomonic of non-accidental injury.

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