

CRP values do not return to the normal range or rise after an initial decrease. Clinical and laboratory suspicion should prompt surgical exploration and sampling.

In osteomyelitis of >1 year's duration, single-photon emission CT plus conventional CT (SPECT/CT) is a good option, either with ^{99m}Tc methylene diphosphonate (^{99m}Tc -MDP)–labeled leukocytes or with labeled monoclonal antibodies to granulocytes. Surgical debridement is needed for diagnostic (biopsy culture, histology) and therapeutic reasons.

TREATMENT

Osteomyelitis in Long Bones

Treatment for acute hematogenous infection in long bones is identical to that for acute vertebral osteomyelitis ([Table 131-1](#)). The suggested duration of antibiotic therapy is 4–6 weeks. In patients with good soft tissue condition and no sequestra or implants, generally no surgical intervention is required. According to a controlled trial, oral treatment can be given, provided that a regimen with excellent oral biocompatibility is available. An initial IV course can be as short as a few days, if the microorganism and its antibiotic susceptibility is known. In recurrences of chronic osteomyelitis as well as in each type of exogenous osteomyelitis (acute, chronic, with or without an implant), a combination of surgical debridement, obliteration of dead space, and long-term antibiotic therapy is required. The length of therapy depends on the completeness of the surgical intervention (removal of sequestra, implants, and necrotic tissue).

The therapeutic aims in patients whose infections are associated with internal fixation devices are consolidation of the fracture and prevention of chronic osteomyelitis. Stable implants can be maintained except in patients with uncontrolled sepsis. Appropriate antimicrobial therapies are listed in [Table 131-2](#). The cure rate for early staphylococcal implant-associated infections treated with a fluoroquinolone plus rifampin is >90%. Rifampin is efficacious against staphylococcal biofilms of ≤ 3 weeks' duration. Similarly, fluoroquinolones are active against biofilms formed by gram-