

Treatment of infected tibial nonunion with tobramycin-impregnated calcium sulfate: report of two cases

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The treatment of infected tibial nonunion usually includes a staged reconstruction protocol. We present 2 patients with tibial nonunion and plate loosening with oxacillin-resistant *Staphylococcus aureus* infection. The patients were treated using the removal of the plate, radical debridement, and implantation of gentamycin-impregnated cement beads during the first stage. During the second stage, plate fixation was performed and tobramycin-impregnated calcium sulfate (Osteoset T) was used as a bone graft substitute. Neither an autogenous bone graft nor an allograft was used. At 3 years of follow-up, each tibia showed good union, and there was no recurrence of infection. We consider tobramycin-impregnated calcium sulfate to be an alternative method of bone grafting to treat infected tibial nonunion.