

The invention relates to medicine, in particular to traumatology and orthopedics, reconstructive surgery and can be used for restoring long tubular bone defects.

Summary of the invention consists in that it is carried out in two stages, namely in the first stage is made an incision at the level of the shank, on the anteromedial side, from the greater tubercle of tibia to the distal 1/3 of the shank, then is removed the tibial periosteum, is formed an annular bone defect of a length of 3.0 cm in the medial 1/3 of the shank, the bone fragments are placed in the correct position and fixed with a metal plate with screws, and the defect cavity is filled with a cement spacer with an antibiotic, afterwards is performed the wound lavage with antiseptic solutions and the wound is sutured in layers. After 2 weeks, the second stage is carried out, which includes the incision of soft tissues at the same level, is removed the cement spacer, and the remaining cavity is filled with a tubular cortical demineralized bone graft and then the wound is sutured in layers, and locally is inoculated an allograft containing a culture of mesenchymal stem cells with a concentration of  $4.5 \times 10^6/\text{ml}$ , then at the 6th week is made an incision at the same level, are removed the metal plate and the screws, and the wound is sutured in layers.

Claims: 1