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## BANKED BONE ALLOGRAFT IN ORTHOPAEDIC SURGERY

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### SUMMARY

Reconstruction of the massive bone defects due to trauma, bone tumor, the loosening of joint replacement, and so on is a challenging procedure in Orthopaedic Surgery. As materials for bone grafting, autografts, synthetic bone substitutes, and banked bone allografts have mainly used. Autografts have the predominant property of osteoinduction and osteoconduction, however, the volume and shape that can be excised is limited. Most synthetic bone substitutes have an ability of osteoconduction but not an ability of osteoinduction. In contrast, banked bone allografts have both abilities although osteoinductive ability is less than that of autografts. Various volume, shape and size of banked bone allografts can be prepared. The usage of banked bone allografts in bone grafting is less frequently, however, banked bone allografts continue to be a necessary material in orthopaedic surgery. In this lecture I overview the advantage and current issue of banked bone allografts. I also demonstrate how to use banked bone allograft especially knee surgery and introduce a trial to reconstruct the massive bone and cartilage defect.