

# Prevention and Treatment of Complication of Prosthesis Replacement of Knee Tumor

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**【Abstract】 Objective** To retrospectively investigate the prosthesis survival and complications after custom-made prosthesis replacement of knee tumor . **Methods** 214 patients with bone tumors around knee joints underwent custom-prosthetic replacement from January 2003 to January 2013, were respectively analyzed. The diagnoses were osteosarcoma(n=132), giant cell tumor(n=53), aneurysmal bone cyst(n=1), fasciculated sarcoma(n=3), malignant fibrous histiocytoma(n=10), chondrosarcoma(n=6), chondroblastoma(n=1), metastatic tumor(n=4) and other types of bone tumors(n=3) . The distal femur was affected in 150 patients and the proximal tibia in 64. **Results** 187 patients were followed up for mean following period of 42 months(30~132 months) . Complication occurred in 46 patients: early stage infection or nonunion of wounds(n=15), peroneal palsy (n=3), late infection(n=5), aseptic loosening(n=14), breakage of prosthesis(n=4) and periprosthetic fracture(n=5). **Conclusion** The complication rate of proximal tibia tumor is higher than the rate of distal femur. Common complication of tumor prosthesis replacement of knee joint are:aseptic loosening, infection or nonunion of wounds, peroneal palsy, late infection, aseptic loosening, breakage of prosthesis and periprosthetic fracture. Rare complication consist: deep venous thrombosis of lower extremity, pulmonary embolism and stiffness of the knee. Common complication of tumor prosthesis replacement of knee joint could be treated and prevented.

**【Key words】** Bone neoplasms ; Knee prosthesis ; Postoperative complications