

**FC-051****The long term follow up after salvage surgery and MUTARS custom made prosthesis implantation around the arm and forearm****D. Kotrych**, A. Bohatyrewicz*Pomeranian Medical University of Szczecin, Szczecin, Poland*

Introduction and Aims: The reconstruction of massive bone defects in patients with primary and metastatic bone tumors in the upper limb is a challenging procedure not only because of the complicated surgical technique but also due to the higher rate of postoperative complications. The aim of study is to present results of possible reconstruction around the arm and forearm.

Method: We have presented the possibilities of salvage surgery in patients with massive tumors around the shoulder, elbow and forearm. The material composed of 42 selected patients diagnosed with bone tumors treated at the Department of Orthopaedics, Traumatology and Orthopaedic Oncology of Pomeranian Medical University of Szczecin between 2000 and 2014. Twenty patients suffered from primary bone tumors and another twenty two had metastatic lesions. All of them were operated with the usage of Mutars modular and custom made systems of the forearm as well as reconstructive techniques and bone grafts and bone substitutes. The second look surgical procedures included: revision arthroplasty, reconstruction of the rotator cuff, periprosthetic fracture treatment, recurrence and infection treatment, plastic surgery.

Results: The complication rate was 23,6 %. The clinical follow-up period varied in different cases. The most frequent complication was infection which occurred early after chemotherapy in 5 patients. One late infection was observed. In one case skin necrosis was present. We have treated two periprosthetic fractures. Recurrence occurred in 1 patient with primary lesion. The survival rate was mainly dependant on the kind of tumor, range of resection and late diagnosis of the disease. In most cases it was the reason for the recurrence or metastasis.

Conclusions: The tendency to limit the indications for amputation in patients with bone tumors especially around the forearm has been strongly emphasized.