

Surgical Management of Pathological Fractures of Extremities in Patients with Myeloma Using Custom Prosthesis

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Abstract

The major clinical manifestations of Multiple Myeloma result from bone destruction. We analysed nine patients of Multiple Myeloma with pathological fractures of extremities who were surgically treated by custom prosthetic replacement in a single institution during a 14 year period (1990 – 2004). The mean age was 47.7 years and females predominated the series. Femur was the most common location. Prosthetic joint replacements were done in five patients, total bone (femur) replacement in one and intercalary prosthesis for shaft of long bones was done in 3 patients. All patients received preoperative chemotherapy. With an average follow up of 88.2 months, three patients died due to progression of the disease. Late deep infection, aseptic loosening and periprosthetic fracture occurred in one patient each. The functional outcome was excellent in three, and good in three patients. Five year Kaplan Meier survival rate of the patients was 66.7%.

Level of evidence: level IV (clinical case series)

Keywords: multiple myeloma, custom prosthesis, functional outcome