Resection arthrodesis for primary bone tumour about the knee.
Kwon MK, No ES, Panabokke R, Saw A, Sangupta S

Abstract
Bone defect following en bloc resection of primary bone tumor around the knee can be reconstructed by allograft or prosthesis or combination of both. Resection-arthrodesis is an alternative option for young vigorous patients facing circumstances of financial constrain or limited supply of allograft. This study was undertaken to determine the outcome and complications associated with resection-arthrodesis of 22 primary bone tumors (13 giant cell tumors and 9 osteosarcomas) around the knee treated between 1990 and 2003 at the University Malaya Medical Center. The mean follow-up was 6 years (range 1-13 years). Three patients with osteosarcoma died of lung metastasis, 3 required above knee amputation and 2 defaulted follow-up. Local complications of the procedure include infection in 8 cases (36.4%), non-union 7 (31.8%) and mal-union. Of 14 patients who returned for final evaluation, 79.8% had satisfactory outcomes according to the Musculoskeletal Tumor Society grading system. In conclusion, resection-arthrodesis of the knee is a viable treatment option for selected patients with primary bone tumor around the knee, and good functional outcome can be expected in the presence of short-term local complications.