

**Clinical Outcome of En Bloc Lumbopelvic Resection for Osteosarcoma and Chondrosarcoma**

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林育民<sup>1</sup> Peter S. Rose<sup>2</sup> Michael J. aszemski<sup>2</sup> Franklin H. Sim<sup>2</sup>  
台中總榮民總醫院<sup>1</sup> Mayo Clinic, Rochester, MN, USA.<sup>2</sup>

**Introduction:** En bloc lumbopelvic resection for malignancies in the sacrum and lower lumbar spine is challenging and technique demanding. We present the outcomes of lumbopelvic resection for osteosarcoma and chondrosarcoma.

**Materials and Methods:** A retrospective review of 34 patients diagnosed with osteosarcoma or chondrosarcoma who underwent spinopelvic resections from 1994 to 2011 was performed. Mean follow-up of survival patients was 47 months. Patient, tumor, and surgery characteristics were evaluated to identify the prognostic variables.

**Results:****Osteosarcoma (12 patients).**

The median age of our study population was 29 years, and six were female. AJCC staging was IIA in one patient, IIB in nine patients, III in one patient, and IVA in one patient. Median tumor largest diameter was 11.75 cm. Median wound defect size was 23.5 cm. Margin status was R0 in ten patients, R1 in 2 patients, and R2 in 0 patient. Two patients had tumor thrombi. Seven of 12 patients died, and the median survival was 12.9 months. Five patients developed local recurrence, eight patients had metastases, and six patients had infection. The 5-year survival rate was 15%.

**Chondrosarcoma (22 patients)**

The median age of our study population was 50 years, and 16 were female. AJCC staging was IA in two patients, IB in three patients, IIA in four patients, IIB in 11 patients, III in one patient, and IVA in one patient. Median tumor largest diameter was 10.5 cm. Median wound defect size was 20.25 cm. Margin status was R0 in 21 patients, R1 in 1 patient, and R2 in 0 patient. Five of 22 patients died, and the mean survival was 103 months. Four patients developed local recurrence, seven patients had metastases, and nine patients had infection. The 5-year survival rate was 60%.

**Discussion:** The prognosis for patients with osteosarcoma is quite dismal. Positive margin is a poor prognostic factor. The overall survival after lumbopelvic resection continued to be guarded.

**Massive Allograft Reconstruction with Arthroplasty after Resection of a Periacetabular Tumor a Case Report and Literature Review**

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林宗立 楊傑思 黃鏗樂 許弘昌  
中國醫藥大學附設醫院骨科部

**Introduction:** Pelvic reconstruction after periacetabular tumor removal remains a complex and challenging procedure that carries a high morbidity rate and can result in poor clinical outcomes. The massive pelvic allograft reconstruction is a rewarding but demanding procedure. We report a case received tumor resection following a massive allograft to reconstruct the pelvis. The radiographic and functional outcomes and complications were evaluated.

**Materials and Methods:** A 40 year-old general health female who had modified radical mastectomy for left breast cancer at stage II 8 years ago. She had completed adjuvant chemotherapy and disease free during follow-up. However, local recurrence of left breast and metastasis of left pelvis was diagnosed currently. The pelvic lesion was Harrington class IV, but she could walk with mild hip pain. Surgery was performed after preoperative embolization. Reconstruction of the hemipelvis by a massive pelvic allograft with locking plates and total hip arthroplasty was performed after type I and II periacetabular pelvic resections. Patients were examined clinically and radiographically and were assessed functionally with the Musculoskeletal Tumor Society score.

**Results:** Bone union was achieved on 6th month during follow-up. There was no infection, local recurrence or dislocation. The Musculoskeletal Tumor Society score was 28.

**Discussion:** Reconstruction of the hemipelvis by a massive allograft with locking plates and arthroplasty is a rewarding but demanding procedure and should be reserved for physically active patients who are in good general health.