

Surgical Margins and Oncological Outcomes of Hemipelvectomies for Bone and Soft Tissue Tumours - A Decade of HUSM Experience

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ABSTRACT

Background: Safe surgical margins are difficult to achieve when performing surgical resections for bone and soft tissue tumours involving the pelvis. We evaluated whether safe surgical margins could be achieved and if oncological outcomes could be predicted based on microscopic marginal status. **Method:** We analyzed 53 consecutive patients surgically treated throughout a 10-year span at a single referral centre between 2001 and 2010. Various clinicopathologic factors were analyzed in relation to the oncological outcomes of overall survival and local recurrence. **Results:** Majority of cases were primary tumours (90%). Chondrosarcoma (n = 11) and osteosarcoma (n = 10) were the most common diagnoses. Eighteen patients underwent external hemipelvectomy and 35 patients were subjected to internal hemipelvectomy resection of various types. Average age was 40.12 years (range: 12-79 years). Average follow up is 10.4 months (range: 0-108 months). Thirty-seven patients underwent macroscopically wide resection but only 46% had clear marginal statuses. **Conclusion:** Positive surgical margins had a weak adverse prognostic effect, which was more pronounced for those patients escaping an early relapse. Other prognostic factors and relation to the oncological outcomes are further outlined in the article.