

Long Term Outcomes of Locally-Recurrent Synovial Sarcoma

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INTRODUCTION: Synovial sarcomas are rare soft tissue sarcomas which require multidisciplinary management. Long term outcomes in patients with local recurrence (LR) are unknown. This study evaluates the clinical outcomes of locally-recurrent synovial sarcomas.

METHODS:

One hundred seventy-nine patients with synovial sarcoma from 1995-2022 were reviewed. The mean age at diagnosis was 38 years. The median pre-treatment tumor dimension was 6 cm. Patients were most-commonly treated with wide surgical excision (69%); 72% and 62% of patients received radiation and systemic therapy, respectively.

RESULTS:

Nineteen patients had LR (14 extremity, 3 chest wall, 2 pelvis) at a median 13-months postoperatively. The local recurrence-free survival was 95% at 1 year, 88% at 5 years, and 85% at 10 years. Positive margins occurred in 8 patients and were associated with increased risk of LR (HR 5.9, 95% CI [1.9, 18], $p=0.002$). There was no association with tumor size, use of chemotherapy or radiation. LR was associated with an increased risk of metastatic disease (HR 3.2, 95% CI [1.7, 6.0], $p<0.001$) and death due to disease (HR 4.6, 95% CI [2.4, 8.8], $p<0.001$). Disease specific survival (DSS) after LR was 72% at 1-year, 56% at 2-years, and 23% at 5-years, compared to 95% at 1-year, 69% at 2-years and 59% at 10-years for patients without LR.

DISCUSSION AND CONCLUSION:

The 10-year rate of LR of synovial sarcoma was 15%, with positive surgical margin associated with increased risk. Our results suggest LR is a poor prognostic indicator for metastasis and DSS after excision of synovial sarcoma.

Disease Specific Survival in Patients Who Did & Did Not Develop Local Recurrence of Synovial Sarcoma

