A Long Term Review of Squamous Cell Carcinoma in the Hand

Morad Askari, MD; Steven A. Moran, MD

Background: Squamous cell carcinoma (SCC) is among common malignancies of the hand. Yet recurrence rates, regional and distant metastatic rates, and long-term survival rates have not been well defined. This study was aimed to evaluate the risk factors for local and regional recurrence.
Methods: The records of all patients who were treated for SCC of the hand over a 20-year period were reviewed. Data was collected on demographics of the patients, the tumor, as well as pre- and post-operative care received. Overall survival, recurrence-free survival, and survival free of SCC in the same upper extremity for several demographic factors were analyzed.
Results: Eighty-six patients were included. Mean age at initial presentation was 69.4 years. Mean follow-up was 6.4 years. Estimated overall survival was 88% and 57% at 5 and 10 years respectively. Recurrence-free survival was 67% and 50% at 5 and 10 years respectively. Rate of metastasis was 3.5%. Lymph node biopsy was performed in 4 cases with clinically abnormal lymph node exam with 2 positive results. Average time to first recurrence was 4.1 years. Webspace location, bilateral tumors, multiple number, and prior history of SCC were among factors with increased risk for recurrence. Survival free of SCC in the same upper extremity was 72% and 54% at 5 and 10 years respectively. Younger age, history of transplantation, multiple number, and use of flap or skin graft for closure were among factors associated with increased risk of same extremity SCC development. No significant difference was noted among different treatment modalities for overall survival, recurrence-free survival, or SCC occurrence in the same upper extremity.
Conclusion: SCC tumors of the hand have a high tendency for local recurrence but low rate of metastasis. Specific characteristics of the tumor may increase chances of recurrence. Difference in surgical modalities maybe less exaggerated for these tumors when negative margins are obtained. SLNB is likely of little benefit in patients with low-risk tumors with no clinical evidence lymph node involvement.