

ABSTRACT NO. R18

**UTILITY OF SENTINEL LYMPH NODE BIOPSY IN HIGH-RISK CUTANEOUS SQUAMOUS CELL CARCINOMA**

\*Avin ID, Wu PC

VA Puget Sound Health Care System/University of Washington, Seattle, WA

**BACKGROUND:** Cutaneous squamous cell carcinoma (SCC) is the second most common skin cancer. High risk SCC as determined by size, differentiation, margin status, perineural and lymphovascular invasion are at higher risk for metastasis and worse prognosis. Sentinel lymph node biopsy (SLNB) has been extensively studied as a reliable staging methodology in melanoma and breast cancer patients, but its role in high-risk cutaneous SCC patients remains unproven.

**PATIENTS AND METHODS:** A total of 6 patients with clinically node-negative cutaneous SCC underwent SLNB between 1999 and 2006. All patients were characterized with high-risk SCC including 2 head and neck primaries, one perineal lesion, one chest wall lesion, and two extremity lesions. All patients underwent preoperative lymphoscintigraphy and four patients had SLN identified with intraoperative blue dye injection. Sentinel nodes were identified and analyzed by H&E serial cross section in all 6 cases, and additional immunohistochemistry in 3 patients.

**RESULTS:** There were no surgical complications as a result of the SLNB procedure. A total of 10 SLN were identified in 6 SCC patients. There were no positive SLN identified by histopathologic analysis and none of the 6 patients underwent additional therapy following tumor excision. Two patients (33%) experienced tumor recurrences during follow-up.

**CONCLUSIONS:** In our series of high-risk cutaneous SCC patients, SLNB was technically safe and feasible in all patients without significant morbidity. We were unable to identify any positive SLN in 6 patients with high-risk SCC. The negative predictive value of SLNB in this study was 83%. These results underscore the potential limitations of SLNB in high-risk SCC patients and the importance of diligent followup even in patients with negative SLNB. The role of SLNB in high-risk SCC patients remains unclear, should not be considered as standard practice and deserves rigorous study in a clinical trial setting.