

Incidence of Residual Squamous Cell Carcinoma in Situ on Excision Specimens following Shave Biopsy

Devan Crow, B.A., Jesalyn Tate, M.D., Jo Wick, Ph.D., Spencer McClure, M.D., Bao Vincent Ho, M.D.

University of Kansas School of Medicine-Kansas City, Kansas City, KS, Department of Dermatology

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Introduction. Squamous cell carcinoma (SCC) is the second most common skin cancer in the US, and its incidence and treatment costs are rising. Previous work remains unclear on the incidence of residual SCC in situ (SCCis) and of SCCis upstaging to invasive SCC on excision specimens. The present investigation aimed to understand the incidences of residual SCCis, upstaging to invasive SCC, and residual positive margins on excision specimens following an initial positive SCCis shave biopsy.

Methods. A retrospective chart review was conducted using charts obtained from the University of Kansas Health System to include those with an initial positive SCCis shave biopsy and subsequent treatment with excision. Statistical analysis was performed utilizing a 95% confidence interval to evaluate rates. A chi square test was performed for bivariate analysis.

Results. The chart review yielded 665 patients (age, [mean \pm SD] 69.8 ± 9.73 ; male, 401 (60.3%); tumor size, 1.01 ± 0.65 cm²). Following an initial positive SCCis shave biopsy, 244 (36.7%) cases had residual tumor, 1 (0.2%) was upstaged to invasive SCC, and 11 (1.7%) had residual positive margins after excision. Bivariate analysis revealed both older age ($z = -2.1$, $p < 0.05$ years) and larger tumor dimension ($\chi^2_2 = 19.2$, $p < 0.001$) were associated with residual tumor. Those with residual tumor were 70.9 ± 9.31 years old and 54.5% had the largest tumor dimension of >1.0 cm.

Conclusions. The present study aids patients and physicians with decision making regarding treatment following a shave biopsy for SCCis.