

## **Mohs Resection of Alar Rim Basal Cell Carcinomas: Medial-Caudal Positive Margins Are More Common**

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**PURPOSE:** The purpose of our study was to examine the largest retrospective cohort of patients who have undergone Mohs surgical treatment for basal cell carcinomas (BCC) of the ala. A novel method of analyzing Mohs maps was created to examine directionality of positive margins.

**MATERIALS AND METHODS:** All patients undergoing reconstruction following primary BCC excision of the nasal alae were recruited through a single institution. Patient demographics, details of resection and reconstruction were recorded. Positive margins were scored using a quadrant-based directionality system. Defect size was classified as large or small stratified by median defect area. Fisher's exact-tests were performed.

**RESULTS:** A total of 124 patients (63 male; 61 female) were included in this study. Mean age at time of surgery was  $67 \pm 12.7$  years. Most patients required multiple levels for dermatopathological clearance (n=101, 81.5%). Directionality was found to be preferentially positive in the medial-caudal direction (n=22, 18%), medial-cephalad direction (n=13, 11%), and lateral-caudal direction (n=10, 8%). Median defect area was  $0.81\text{cm}^2$  (Q1: 0.55-1.5). Defect size significantly influenced reconstructive method ( $p < 0.01$ ). Small defects were commonly treated with secondary intention (n=24, 40%), while larger defects were reconstructed with nasolabial flaps and full thickness skin grafts (n=15, 25% and 22%). Follow-up time ranged from 0-87 weeks and complications were low (n =14, 11.2%).

**CONCLUSION:** Surgical margins are preferentially positive in the medial-caudal direction in the alar region. A negative margin in Mohs surgery is an acceptable method of ensuring oncological clearance in a sensitive cosmetic area, which historically has had high recurrence rates when treated without Mohs. Reconstruction under local anesthetic is safe and complication rates are low.