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Abstract

Prospective evaluation of complications in dermatologic surgery associated with hypertension

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Background
Poorly controlled hypertension is a known risk factor for surgical complications. Objective: This study examines the incidence of complications in participants undergoing Mohs micrographic surgery (MMS) based on preoperative blood pressure (BP) measurement and investigates the role of potential confounders in the relationship between preoperative BP and postoperative complications.

Methods
This 10-month prospective cohort study at the University of California, San Francisco (UCSF) Dermatologic Surgery Center approached all patients undergoing MMS for participation and assessed for the diagnosis of hypertension, anti-hypertensive medication use, use of tobacco or blood thinners, immunosuppression, concomitant diabetes, or previous treatment with radiation therapy at the surgical site.

Results
Preliminary analysis included 830 people. Overall, 676 patients had their follow up in the Mohs unit. The rate of complications was as follows: postoperative hemorrhage (6, 0.8%), hematoma formation (7, 1.0%), wound infection (16, 2.4%), wound dehiscence (19, 2.8%), flap necrosis (13, 1.9%), graft necrosis (8, 1.2%). Eight patients experienced two complications. There was no significant relationship between a patient’s BP and the presence of complications. In multivariate analyses that include all the potential confounding variables, a self-reported history of diabetes was the only factor that influenced the presence of complications ($P=0.039$).

Conclusions
Our preliminary analysis showed no relationship between BP and the rate of complications, while the presence of diabetes significantly increased a patient’s risk for a wound complication. This study was limited by a relatively small number of complications and more data will be needed to further investigate the relationship.