Prebiopsy Photos Help Prevent Wrong-Site Surgery

BY SUSAN LONDON
Contribution Writer

VANCOUVER, B.C. — Photographing cutaneous lesions before biopsy can help prevent wrong-site surgery when the lesions prove to be malignant and patients must undergo Mohs excision of the remaining tumor, according to an observational study of 271 biopsy sites.

Factors such as healing and acanthosis may make it difficult to identify biopsy sites at the time of Mohs surgery, Dr. Jamie L. McGinness, a dermatologic surgeon in Lebanon, Kan., and Lee’s Summit, Mo., said at the annual meeting of American College of Mohs Surgery.

In a previous survey of Mohs surgeons, other investigators found that 51% of the respondents had been sued and that performing surgery on the wrong site was a leading reason for the lawsuit. Seventy-five percent are due to human error, and 11% of the 300 respondents had been sued. One study found that 5% of the 300 respondents had been sued and that performing surgery on the wrong site was a leading reason for the lawsuit. Seventy-five percent are due to human error, and 11% of the 300 respondents had been sued and that performing surgery on the wrong site was a leading reason for the lawsuit.

“With longer wait times between biopsy and surgery, lesions could heal and the rates (of incorrect identification) could actually be even higher,” he explained. Dr. McGinness reported no conflicts of interest related to the study.

BY MICHELE G. SULLIVAN
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Nicks, Annotations Also Reduce Chance for Error During Mohs

WILLIAMSBURG, VA. — Consistent application of tissue nicks and annotated tissue transfer cards can significantly reduce the chance of error in Mohs surgery.

“Recurrence after Mohs surgery is very low, only 1%-2% at most, but when we look at the reasons behind those recurrences, 75% are due to human error, and of those, 10% are due to incorrect mapping and excision,” said Dr. Tri H. Nguyen, director of Mohs micrographic and dermatologic surgery at the University of Texas M.D. Anderson Cancer Center, Houston.

“This includes tissue-orientation mistakes, mapping inaccuracies, mislabeling of sections or slides, and insufficient resection,” Dr. Nguyen said at a meeting of the American Society for Mohs Surgery.

He methodically employs a system of identification strategies that nearly eliminate the chance of orientation errors, but an informal survey of fellowship programs showed that few physicians may be using this same level of caution.

Dr. Nguyen asked his residents about orientation techniques taught in the 14 Mohs fellowship programs for which they applied. Only three programs used preprinted maps, and only one used a preprinted tissue transfer card. Only five programs used tissue nicks to orient the sample, and only two of those used double nicks to add an additional layer of security.

“There are tremendous variations in the way we practice mapping and orientation, and probably all are adequate for primary, low-risk, single-stage Mohs resections,” he said. “We run into problems with high-risk tumors with multiple convolutions or convexities, and in surgeries with multiple stages and multiple sites.”

Anatomical maps and transfer cards can help reduce these problems. The cards have preprinted maps with illustrations of anatomical areas, and they also absorb moisture from specimens, which decreases the chance that they will shift position or fall off during the transfer.

“With a single, there is always a chance the tissue will get dropped or shifted and you will lose the accuracy of your orientation. If you have a second nick consistently placed, you will always know exactly how the specimen orientation with or without an anatomical transfer card, Dr. Nguyen said.

“With longer wait times between biopsy and surgery, lesions could heal and the rates (of incorrect identification) could actually be even higher,” he explained. Dr. McGinness reported no conflicts of interest related to the study.

Prophylactic Antibiotics Before Surgery Unnecessary in Most

BY MICHELE G. SULLIVAN
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WILLIAMSBURG, VA. — Patients with prosthetic cardiac valves and recently implanted joint prostheses are among the few who should receive prophylactic antibiotics before surgical procedures, according to a dermatologic surgeon.

Prosthetic devices sometimes grow coagulase-negative Staphylococcus aureus, which can cause a life-threatening endocarditis or, in the case of joint prostheses, an intra-articular infection that can necessitate replacement of the device. “If a patient [in these categories] comes to me for surgery and has not been prophylaxed, I will not do the procedure,” he said. Dr. Stephen Spencer of Port Charlotte, Fla.

Neither of the guidelines that address prophylactic antibiotics—the 2007 guidelines for preventing infective carditis and the 2003 guidelines for preventing hematicogenous total joint infections—specifically deal with dermatologic surgery, but dermatologists can rationally extrapolate the recommendations to their own patients, Dr. Spencer said at a meeting of the American Society for Mohs Surgery.

For patients with prosthetic cardiac valves, the American Heart Association guidelines recommend 2 g of amoxicillin or 1 g of clindamycin 1 hour before the procedure. Penicillin-allergic patients can take cephalexin, clindamycin, or azithromycin (Circulation 2007;116:1736-54).

For joint prostheses, the 2007 guidelines recommend a total joint replacement in the past 2 years should take 2 g of cephalexin, cephradine, or amoxicillin 60 minutes before surgery. Penicillin-allergic patients can take clindamycin. Choices for injected antibiotics include clindamycin, cefazolin, or ampicillin, according to guidelines issued by the American Dental Association and the American Academy of Orthopedic Surgeons (J Am. Dent. Assoc. 2003;134:895-9).

For most other patients, including healthy individuals with joint replacements more than 2 years old, the risks of adverse events associated with antibiotic treatment probably outweigh any potential benefit it might have in preventing infective complications, including infective endocarditis, said Dr. Spencer.

“Very few healthy people need these prophylactic antibiotics,” he said, citing a 2006 study from Australia that found an extremely low rate of wound infection after dermatologic surgery in the absence of prophylactic antibiotics (Dermatol. Surg. 2006;32:819-26).

The 3-year study included 5,091 lesions treated on 2,442 patients, none of whom received preoperative antibiotics. The overall infection incidence was 1.5%, and many individual procedures had similarly low rates: curettage (0.7%); skin flap repairs (3%); simple excision and closure (0.5%). Skin grafts and wedge excisions had higher rates (9% each).

The investigators concluded that surgery to the nose, ear, fingers, and lips, skin flap surgery, and surgery on diabetics, smokers, and those on anticoagulants did not warrant prophylactic antibiotic treatment. They did recommend antibiotics for procedures below the knee, wedge excisions of lip and ear, all skin grafts, and lesions in the groin, Dr. Spencer noted.