How to Use Mohs to Reconstruct the Nose

BY PATRIC WENDLING
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VIENNA — For skin cancers on the nose, Mohs micrographic surgery is associated with low recurrence rates and spares a maximal amount of healthy tissue, Abel R. González, M.D., reported at the 10th World Congress on Skin Cancer in Vienna.

“Some patients just want a healed wound, but others have a high aesthetic standard,” said Dr. González of the Institute of Oncology Angel H. Roffo at the University of Buenos Aires. “They wish a nose restored to normal, no matter how much time or effort it takes” to accomplish the results.

Of the 2,648 Mohs surgeries performed between 1990 and 2004 at the Institute, 780 (29%) tumors were located on the nose. A review of 758 cases shows 322 (42%) of cases were managed with secondary-intention healing, 306 (40%) with grafts, and 19 (2%) with primary closure.

Secondary-intention healing is simple, complications are rare, and it saves time and cost associated with reconstruction, Dr. González said, at the meeting cosponsored by the Skin Cancer Foundation.

The upper two-thirds of the nose and the columella are covered by thin, non- baceous and slightly mobile skin. Here, local flaps rotate easily and are a good choice for small defects. Grafts blend well into the smooth and shiny surfaces of the dorsum and sidewalls, Dr. González said.

On the tip or ala, the skin is sebaceous and adherent to underlying tissues. Single lobe flaps rotate poorly, but bilobed or nasolabial flaps can overcome these problems. Grafts are a poor choice as they create a patch of shiny skin in the thick, pitted skin of the area, he said.

For superficial defects, a full-thickness skin graft can be performed. When using grafts, the preference is for delayed, full- thickness skin grafts because bleeding or edema diminishes when a graft is de- layered rather than performed immediately. This also results in a more vascularized bed, which increases graft survival.

When bone or cartilage is exposed, a flap will be necessary.

When nasal support is missing, and a framework needs to be restored, a distant flap will prevent tension that could distort cartilage reconstruction. A distant flap is needed when repairing defects larger than 1.5 cm.

Incisions placed strategically in the joints that separate the subunits of the nose—the tip, ala, paired sidewalls, dorsum, soft triangles, and columella—will be perceived as a normal fold or contour line. If more than 50% of a subunit is lost, the guiding principle is that replacing the entire unit usually gives a better result than patching the defect.

The forehead flap is an excellent option in nasal reconstruction because the forehead skin matches nasal skin almost exactly and has superb perfusion. The forehead flap should always be vertically oriented because of perfusion, and narrow, paramedian flaps allow easier rotation. It should never reconstruct the cheek.

Two weeks later, granulation tissue filled the defect.

Careful Tumor Examination Can Improve Mohs Outcomes

BY PATRIC WENDLING
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V IENNA — Successful Mohs micro- graphic surgery depends on two things: that the tumor is contiguous and that 100% of the surgical margins are examined histologically, Stuart J. Salasche, M.D., said at the 10th World Congress on Can- cers of the Skin.

“Recurrences do happen, and if you’re doing 1,000, 2,000 cases a year then even small percentages add up to numbers, and each number represents an individual pa- tient who put [himself or] herself in the fire,” Dr. Salasche said.

Some recurrences are caused by ‘‘house- keeping’’ errors such as inadequate slide preparation, mapping errors, and poor tissue samples, and can be reduced with repetition and good staff training, he said.

Large tumors in general, and particu- larly those on the ear or medial canthus of the eye, can be difficult to map, and should be marked carefully with scalpel hatch marks that correspond to color-coded maps for more accurate orientation.

Poor slide preparation can result in false negative margins because of missing epidermis or holes and folds in the tissue where tumor can exist.

False-negative margin situations are fre- quently caused by noncontiguous tumors. Common culprits are recurrent tumors where residual tumor was left in multiple foci of which only one became clinically apparent. This applies particularly in immu- nonsuppressed patients, he said. Some tumors may inherently have skip areas such as those seen in sebaceous carcinoma and Merkel cell carcinoma.

“The ones that we see most often and cause us the most trouble are tumors that have already been operated on or previ- ously treated,” said Dr. Salasche of the Ariz- ona Cancer Center at the University of Arizona in Tucson.

When evaluating recurrent tumors, consider the original treatment modality, the type of repair used, the time from original surgery to clinical recurrence, the ag- grasiveness of the tumor histology, and whether the area was covered with a graft, he said at the meeting, cosponsored by the Skin Cancer Foundation.

In the approach to a recurrence, all vi- sual tumor and the entire scar should be resected, if the scar was part of the original tumor. Pay particular attention to squamous cell carcinomas or lesions on the scalp, temple, or forehead, most no- tally in organ transplant patients, he said.

Inflammation can also mask tumors and is common in elderly populations with chronic lymphocytic leukemia. Tumor masked by the inflammation may be un- recognized by the surgeon, or result in the surgeon chasing the inflammation or sub- clinical extensions as they track along nerves for great distances, he said. Im- munostaining is helpful in these cases.

Another problem is recognizing that basal cell carcinomas probably originate from stem cells that reside in the outer root sheath of the hair follicle, and result in subtle buds of tumor coming off the fol- licle that can be misread as hair follicles, he said.