

# How to Use Mohs to Reconstruct the Nose

BY PATRICE WENDLING  
Chicago Bureau

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 Cancers of the Skin.

“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 flaps, 111 (15%) 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.

For procedures that require nasal reconstruction, skin quality is an important variable.

The upper two-thirds of the nose and the columella are covered by thin, nonsebaceous 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 exudation diminishes when a graft is delayed rather than performed immediately. This also results in a well-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



The final defect after five stages of Mohs surgery is shown.



Two weeks later, granulation tissue filled the defect.

PHOTOS COURTESY DR. ABEL R. GONZÁLEZ

cartilage reconstruction. A distant flap also is needed when repairing defects larger than 1.5 cm.

Incisions placed strategically in the joins 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 just 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. ■

## Careful Tumor Examination Can Improve Mohs Outcomes

BY PATRICE WENDLING  
Chicago Bureau

VIENNA — Successful Mohs micrographic 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 Cancers 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 patient who put [himself or herself] in your hands,” 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 particularly 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 frequently 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 immunosuppressed 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 previously treated,” said Dr. Salasche of the Arizona 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 aggressiveness 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 visual tumor and the entire scar should be resected, as if the scar were part of the original tumor. Pay particular attention to squamous cell carcinomas or lesions on the scalp, temple, or forehead, most notably 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 go unrecognized by the surgeon, or result in the surgeon chasing the inflammation or subclinical extensions as they track along nerves for great distances, he said. Immunostaining 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 follicle that can be misread as hair follicles, he said. ■

### Salex™ (6% Salicylic Acid) Cream

Rx Only

FOR TOPICAL USE ONLY. NOT FOR OPHTHALMIC, ORAL OR INTRAVAGINAL USE.

#### INDICATIONS AND USAGE

For Dermatologic Use: Salex™ Cream is a topical aid in the removal of excessive keratin in hyperkeratotic skin disorders, including verrucae, and the various ichthyoses (vulgaris, sex-linked and lamellar), keratosis palmaris and plantaris, keratosis pilaris, pityriasis rubra pilaris, and psoriasis (including body, scalp, palms and soles).

For Podiatric Use: Salex™ Cream is a topical aid in the removal of excessive keratin on dorsal and plantar hyperkeratotic lesions. Topical preparations of 6% salicylic acid have been reported to be useful adjunctive therapy for verrucae plantares.

#### CONTRAINDICATIONS

Salex™ Cream should not be used in any patient known to be sensitive to salicylic acid or any other listed ingredients. Salex™ Cream should not be used in children under 2 years of age.

#### WARNINGS

Prolonged use over large areas, especially in children and those patients with significant renal or hepatic impairment, could result in salicylism. Concomitant use of other drugs which may contribute to elevated serum salicylate levels should be avoided where the potential for toxicity is present. In children under 12 years of age and those patients with renal or hepatic impairment, the area to be treated should be limited and the patient monitored closely for signs of salicylate toxicity: nausea, vomiting, dizziness, loss of hearing, tinnitus, lethargy, hyperpnea, diarrhea, and psychic disturbances. In the event of salicylic acid toxicity, the use of Salex™ Cream should be discontinued. Fluids should be administered to promote urinary excretion. Treatment with sodium bicarbonate (oral or intravenous) should be instituted as appropriate.

Due to potential risk of developing Reye's syndrome, salicylate products should not be used in children and teenagers with varicella or influenza, unless directed by a physician.

#### PRECAUTIONS

For external use only. Avoid contact with eyes and other mucous membranes.

#### DRUG INTERACTIONS

The following interactions are from a published review and include reports concerning both oral and topical salicylate administration. The relationship of these interactions to the use of Salex™ Cream is not known.

I. Due to the competition of salicylate with other drugs for binding to serum albumin the following drug interactions may occur:

DRUG	DESCRIPTION OF INTERACTION
Sulfonylureas	Hypoglycemia potentiated.
Methotrexate	Decreases tubular absorption; clinical toxicity from ethotrexate can result.
Oral Anticoagulants	Increased bleeding.

II. Drugs changing salicylate levels by altering renal tubular reabsorption:

DRUG	DESCRIPTION OF INTERACTION
Corticosteroids	Decreases plasma salicylate level; tapering doses of steroids may promote salicylism.
Acidifying Agents	Increases plasma salicylate level.
Alkalinizing Agents	Decreases plasma salicylate levels.

III. Drugs with complicated interactions with salicylates:

DRUG	DESCRIPTION OF INTERACTION
Heparin	Salicylate decreases platelet adhesiveness and interferes with hemostasis in heparin-treated patients.
Pyrazinamide	Inhibits pyrazinamide-induced hyperuricemia.
Uricosuric Agents	Effect of probenemide, sulfipyrazone and phenylbutazone inhibited.

The following alterations of laboratory tests have been reported during salicylate therapy:

LABORATORY TESTS	EFFECT OF SALICYLATES
Thyroid Function	Decreased PBI; increased T <sub>3</sub> uptake.
Urinary Sugar	False negative with glucose oxidase; false positive with Clinistest with high-dose salicylate therapy (2-5g q.d.).
5-Hydroxyindole acetic acid	False negative with fluorometric test.
Acetone, ketone bodies	False positive FeCl <sub>3</sub> in Gerhardt reaction; red color persists with boiling.
17-OH corticosteroids	False reduced values with > 4.8g q.d. salicylate.
Vanilmandelic acid	False reduced values.
Uric acid	May increase or decrease depending on dose.
Prothrombin	Decreased levels; slightly increased prothrombin time.

**Pregnancy (Category C):** Salicylic acid has been shown to be teratogenic in rats and monkeys. It is difficult to extrapolate from oral doses of acetylsalicylic acid used in these studies to topical administration as the oral dose to monkeys may represent six times the maximal daily human dose of salicylic acid when applied topically over a large body surface. There are no adequate and well-controlled studies in pregnant women. Salex™ Cream should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers:** Because of the potential for serious adverse reactions in nursing infants from the mother's use of Salex™ Cream, a decision should be made whether to discontinue

nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** No data are available concerning potential carcinogenic or reproductive effects of Salex™ Cream. It has been shown to lack mutagenic potential in the Ames *Salmonella* test.

#### ADVERSE REACTIONS

Excessive erythema and scaling conceivably could result from use on open skin lesions.

#### OVERDOSAGE

See Warnings.

#### DOSE AND ADMINISTRATION

The preferable method of use is to apply Salex™ Cream thoroughly to the affected area and occlude the area at night. Preferably, the skin should be hydrated for at least five minutes prior to application. The medication is washed off in the morning and if excessive drying and/or irritation is observed a bland cream or lotion may be applied. Once clearing is apparent, the occasional use of Salex™ Cream will usually maintain the remission. In those areas where occlusion is difficult or impossible, application may be made more frequently; hydration by wet packs or baths prior to application apparently enhances the effect. Unless hands are being treated, hands should be rinsed thoroughly after application.

#### HOW SUPPLIED

Salex™ Cream is available in 400 gram (NDC 0064-4010-13) bottles.

Store at controlled room temperature 20° - 25°C (68° - 77°F). Do not freeze.

**Salex™**  
(6% Salicylic Acid)  
Cream

Marketed by:

**HEALTHPOINT™**

Healthpoint, Ltd.  
Fort Worth, TX 76107  
1-800-441-8227

Manufactured by:  
DPT Laboratories, Ltd.  
San Antonio, TX 78215

PATENT NO. 6,709,663  
REORDER NO. Salex™ Cream: 0064-4010-13 (400g bottle)

Salex is a trademark of Healthpoint, Ltd.

137037-0404