Border Patrol: Maintain Symmetry After Mohs

Lips, eyebrows, eyelids, and nasal ala pose greatest challenges to postoperative facial symmetry.

By Damian McNamara

Orlando — Maintain the "free borders" when closing a Mohs surgery defect on the face to sustain symmetry and avoid adverse outcomes, Ali Hendi, M.D., advised at the annual meeting of the Florida Society of Dermatologic Surgeons.

Free borders are mobile facial landmarks—the lips, eyebrows, eyelids, and nasal ala—that can be distorted during reconstructive surgery or by contraction of scars after Mohs surgery. Most free borders on the face are curved structures, adding to the correct closure challenge. If surgical closure causes tension or pulls on these focal points, the risk of facial asymmetry increases.

"If there is any deformity that is what catches the eye," said Dr. Hendi, a dermatology surgeon at Mayo Clinic Jacksonville in Florida.

Eclabium of the lip, a permanently raised eyebrow; eyelid edeciation, a conical nasal ala, and an asymmetric nasal alar flare are possible adverse outcomes.

► Lips. "Lips are the central point of facial anatomy. Any pull or asymmetry is very noticeable and not cosmetically acceptable," Dr. Hendi said.

Dogma among dermatologic surgeons is to not violate the vermillion border, but "that doesn't have to be the case," Dr. Hendi said. It is possible in some patients to make an incision across the vermillion and onto the mucosal lip with good outcomes.

As an example, Dr. Hendi described a patient with a Mohs defect on the chin who fared well after such an incision. "I intentionally involved the vermilion border even though I might have avoided it, because otherwise the vermilion border would be pushed up," Dr. Hendi said.

► Eyebrows. Dermatologic surgeons can also disobey another dogma in some cases and make an incision through the eyebrows. Dr. Hendi said. "It's better to have a shorter eyebrow than a deformed eyebrow."

Primary closure of an eyebrow defect is Dr. Hendi's first choice to avoid multiple scar lines. "It's easier on you in terms of time, and easier on patients in terms of fewer complications."

► Eyelids. Elderly patients can have lax eyelids and are at higher risk of ectropion after reconstruction of the upper cheek and/or lower eyelid, Dr. Hendi said. To avoid this droopy look, tension vectors of the surgical closure should be parallel to eyelid margins. A "snap back" test before surgery can help judge the laxity of the lower eyelid. "If it does not snap back, you are more likely to have ectropion."

► Nasal ala. Pull on the alar flare is very noticeable and should be avoided, Dr. Hendi said. A tension vector parallel to the nasal ala can be risky, he said. Perform an excision perpendicular to the alar rim because it does not pull up the nose, Dr. Hendi said.

Simple Strategy Can Be Best Option for Repair of Facial Defects

By Damian McNamara

Orlando — Sometimes the simplest surgical strategy is the best choice for reconstruction of facial defects, according to a presentation at the annual meeting of the Florida Society of Dermatologic Surgeons.

Closure of facial defects requires careful planning, which can be more challenging than the surgery for some reconstructions. "Always talk to patients about their expectations. You may have to do more complex procedures for patients with higher expectations," said Dean M. Toriumi, M.D., who is professor of facial plastic and reconstructive surgery in the department of otolaryngology–head and neck surgery, University of Illinois at Chicago.

Options from simplest to more complex include granulation as secondary intention, closure, primary closure, skin grafts, and local flaps.

Secondary intention can provide a good outcome with small defects, Dr. Toriumi said. However, delayed healing, daily wound care, and visible scars are possible adverse outcomes. He recalled a middle-aged male patient with a non-hair-bearing scalp defect who proved to be a good candidate for secondary intention, he said. "On outcome, it was really hard to detect where the lesion was located."

Primary closure is also a good choice to minimize distortion of structures adjacent to a defect, Dr. Toriumi said at the meeting.

Skin grafts are an option when there is lack of available local tissue. The technique can be simple if there is abundant donor tissue. Color mismatch, contraction, depression of the graft area, and ischemia are potential concerns, Dr. Toriumi said.

A patient was referred to Dr. Toriumi to correct a poor outcome after a nasal supratip skin graft. "It left a depression," he explained. "She was a good candidate because it lifted her nasal tip—a benefit from this operation she did not expect.

When planning an excision, the ideal angle of a defect is about 30 degrees, because it yields less distortion than a wider cut, Dr. Toriumi said.

Some dermatologic surgeons use a fusiform incision, but removal of a "tremendous amount of normal tissue" can be problematic.

Instead, he suggested performing an M-plasty because it employs two 30-degree apices, instead of one, and shortens the overall incision. Once the M-shaped incision is made, advance the apex of the triangle (the center of the M) toward the center of the defect by 2-3 mm, Dr. Toriumi suggested.

A case where an M-plasty produced a good result was a patient with a hemangioma of the eyebrow. An M-plasty inferiorly and superiorly yielded a "reasonable reconstruction" after removal of the hemangioma. However, this technique removed the lateral brow, so hair micrografts were placed to replace the eyebrow hairs.

A more complex reconstruction might call for an advancement flap, rotation flap, or other local flap. An advancement flap is a linear configuration moved in a single direction to correct a defect. Consider wide field undermining to minimize tension on the closure, Dr. Toriumi explained.

If skin is tight, as it can be with a forehead defect, for example, consider an "H-shaped incision, to reduce pull in multiple directions," he added.

A very important technical consideration is to preserve the blood supply to the flap," Dr. Toriumi said. "Limit the length of a flap so you don’t have a problem with blood supply at the distal end."

A rotation flap may be in order for the upper or midcheek region and the scalp. "Most have some advance component—few are 100% rotation flaps," Dr. Toriumi said. A patient with recurrent squamous cell carcinoma of the upper lip fared well with a rotation flap to correct his defect.

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