

Cosmetic Techniques Help to Limit Mohs Scarring

BY DAMIAN McNAMARA
Miami Bureau

PALM BEACH, FLA. — Cosmetic dermatology techniques can be used to improve postsurgical scarring, said Dr. Joel L. Cohen.

Cosmetic dermatology and dermatologic surgery share some common principles, including an appreciation for maintaining anatomy, symmetry, and aesthetic subunits, Dr. Cohen said. The increased risk of skin cancer among patients seeking treatment for signs of photodamage is another area of overlap. Dermatologists well versed in both realms will be particularly adept at improving postsurgical outcomes in their skin cancer patients, he said at the annual meeting of the Florida Society of Dermatology and Dermatologic Surgery.

"It's nice for me to have lasers, fillers, and botulinum toxin in our armamentarium to help with scars," said Dr. Cohen, director of AboutSkin Dermatology and DermSurgery in Englewood, Colorado.

"Scars are clearly permanent but there are things we can do to minimize them or fine-tune their appearance," he said. For example, botulinum toxin can minimize the muscular tension vectors across a large and tight forehead closure from skin cancer by immobilizing the frontalis muscle.

Fillers can be used to improve depressed surgical scars after reconstruction. For example, after initial subcision, scars or contour changes on a patient's ear helical rim can be improved with fillers. The depth of the scar and the anatomic location can determine the choice of filler, he said.

Scar abrasion is another option for some patients. "Sometimes sanding devices are clearly needed and are helpful for textural changes," Dr. Cohen said. Diamond fraise dermabrasion is an example, as well as ablative and fractional resurfacing lasers. "Sometimes I even use a curet to sand a scar if there is a big concern about airborne infectious particles."

Residual erythema following skin cancer repairs can also be significantly improved with lasers. "Postoperative redness is a reality. We all see it, and sometimes intervening and using either a pulsed dye laser or even a pulsed light device can have dramatic results" said Dr. Cohen, who is also an assistant clinical professor of dermatology



The woman above is pictured immediately following Mohs surgery to remove a large morpheiform basal cell carcinoma.



After flap reconstruction, Botox is used to immobilize the frontalis muscle and prevent muscular contraction tension.



One week after Mohs surgery and reconstruction—at the time of suture removal—the forehead surgery site is healing well.



After 3 months, the surgery site is still healing well. Fractional laser therapy for the scar is discussed at this time.

at the University of Colorado, Denver. Sometimes more than one modality is required to satisfy a patient. One young skin cancer patient wanted to quickly improve the bilobed flap scar on her nose in the few months before her wedding, for example. A combination of erbium laser and fractional resurfacing proved to be very helpful in helping to blend the scar line.

He tried several means to improve a hypopigmented full-thickness skin graft scar on the lower eyelid of a middle-aged woman after Mohs surgery. A combination of trichloroacetic acid peels and hydroquinone to the surrounding skin has provided the best results so far, he noted. "This is a great example of how sometimes the older and less expensive treatments are most effective."

"Once you are comfortable treating these types of sur-

gical scars, this knowledge can be very helpful with other common dermatology patients, such as those with acne scars," Dr. Cohen said.

Dermatologists who want to offer aesthetic, surgical, and medical dermatology services may need to adjust their schedule, staff training, and office layout, Dr. Cohen said. Decide what percentage of each type of patient you want to treat on a typical day and cross-train your staff so they are comfortable explaining the different procedures.

Dr. Cohen is a consultant, speaker, clinical trial investigator, and instructor for Allergan (Botox); a consultant, speaker, clinical trial investigator, and instructor for Medicis (Restylane); a consultant and clinical trial investigator for BioForm (Radiesse); and was a consultant for Palomar (LUX1540 fractional laser). ■

Microwave Processing Cuts Time for Creating Mohs Specimens

BY JEFF EVANS
Senior Writer

NAPLES, FLA. — Microwave-assisted processing of permanent paraffin sections takes much less time than the conventional paraffin embedding process for Mohs surgery specimens, yet preserves its advantages over frozen sections in visualizing melanoma in situ, Dr. Raj Mallipeddi said at the annual meeting of the American College of Mohs Surgery.

Permanent paraffin sections are considered the standard for assessing histology, but the long time required to process them may make Mohs surgery inefficient because patients must return at least 24 hours later for additional Mohs stages or the repair procedure. Frozen sections also are

considered by some clinicians to be inadequate to identify atypical melanocytes reliably, said Dr. Mallipeddi, a procedural dermatology fellow at the University of Texas Southwestern Medical Center, Dallas. Microwave tissue processing is "nothing new," and has been used in a variety of histologic procedures in the past few decades.

Dr. Mallipeddi and his associates divided 13 specimens of melanoma in situ from the initial debulking stage of surgery into 4 pieces each. They processed the pieces from each specimen using four different methods. The conventional method was used to create permanent paraffin sections, as was the group's rapid microwave technique. The researchers also made frozen sections stained with hematoxylin and eosin, and frozen sections immunos-

tained with antibodies against MART-1, a protein found on melanocytes.

An experienced Mohs surgeon and a dermatopathologist compared all of the sections in a blind fashion to determine if there were any differences in the ability to visualize normal and abnormal melanocytes, and in the overall ability to see the epidermis and dermis.

There were no significant differences between the two paraffin techniques on those three criteria. The microwave paraffin sections proved to be significantly better than the frozen hematoxylin and eosin sections on all three criteria. Abnormal melanocytes could be visualized significantly better with the microwave paraffin technique than with frozen MART-1 sections, but the microwave method was similar to frozen

MART-1 sections in identifying normal melanocytes. At 200× magnification, the morphology of atypical melanocytes was seen clearly with the microwave technique. MART-1 immunostaining on frozen sections showed melanocyte density well, but individual cell morphology was "not so well depicted," Dr. Mallipeddi said.

The method produces permanent paraffin sections in about 2 hours. The procedure involves fixing fresh tissue for 30 minutes, microwave processing for another 30 minutes, embedding the tissue in paraffin, and then staining the specimen with hematoxylin and eosin for about 10 minutes.

"We believe this technique should be investigated further in the context of Mohs micrographic surgery—not just for melanoma in situ," Dr. Mallipeddi said. ■