Short Incisions, Careful Suture Choice Can Improve Cosmesis

BY MARY ELLEN SCHNEIDER
New York Bureau

New York — Every dermatologist should be able to perform excisional surgery and leave only a fine line scar on the patient's face, Dr. C. William Hanke said at a meeting on medical and surgical dermatology sponsored by Mount Sinai School of Medicine.

Dermatologists who are not able to leave only a fine line scar are falling behind some of the family physicians who are doing excisional surgery, he said. And a scar that is long and noticeable is poor marketing for the physician.

Dr. Hanke, a dermatologic surgeon in Carmel, Ind., who founded the Mohs Micrographic Surgery Unit at Indiana University, Indianapolis, offered several techniques for achieving superior results with excisional surgery.

Make incisions in normal anatomic boundary lines or relaxed skin tension lines to hide scars. "That's where you want your scars to be so that they don't look like scars," he said.

Handle tissue atraumatically by avoiding touching the skin surface with forceps; instead, grab tissue from the bottom.

Make scars as short as possible. A scar longer than 2 cm will be much more noticeable than will shorter scars. By using an M-plasty, the incision can be shortened by about a third.

Don't bury unnecessary suture material. Tying the appropriate number of knots on buried sutures allows you to keep the amount of buried foreign material to a minimum. "The wound doesn't have to work as hard to heal with that smaller volume of foreign material," he said.

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Use fine-caliber suture material to reduce trauma and choose simple closures over complex ones. "If you do a complex closure in a case where you could have done a simple closure and there's a complication, you've got a big complication."

Undermine appropriately to relieve wound tension and facilitate wound-edge eversion. Some dermatologists do a lot of unnecessary undermining and others never do it, but the right balance is likely somewhere in between, he said.

Use appropriate methods of hemostasis. Dr. Hanke said he does some suture ligature and uses a lot of electrocoagulation. Electrocautery is needed sometimes for patients with pacemakers. Pressure also is important, he said.

Use "tie-over" sutures to relieve tension and don't tie sutures tightly. Doing so can result in strangulated tissue that won't be evident until suture removal.

Be a student of dog-ear repair and close wounds rapidly. The medical literature shows that wounds that stay open for more than an hour or 2 have a higher rate of infection. ■

Nested M-Plasty Shortens Some Mohs Closures

BY TIMOTHY F. KIRN
Sacramento Bureau

Palm Desert, Calif. — Use of the "nested" M-plasty technique makes it possible to further shorten round wounds when closing Mohs defects, Dr. Ravi Krishnan said at the annual meeting of the American Society for Dermatologic Surgery.

The technique involves making two Ms, instead of one, in the M portion of the closure. Dr. Krishnan, director of dermatologic surgery at Indiana University, Indianapolis, said he uses a No. 11 blade to remove the Burow's triangles because that blade gives better precision.

"The M portion closes as a broken line, which, as we know, is less noticeable than a straight line," he said.

Dr. Krishnan said he uses the technique primarily when he does not want the closure excisions to extend into an adjacent cosmetic unit, or when he does not want to interrupt a structure such as the eyebrow or the nose.

Dr. Krishnan said he did not know whether his technique was unique, but it has not been described in the dermatology literature.

"It is extremely easy to execute and involves cutting out less skin," Dr. Krishnan added. ■

CK7 Stain Aids Mohs in Extramammary Paget's

BY TIMOTHY F. KIRN
Sacramento Bureau

Palm Desert, Calif. — An immunoperoxidase stain for cytokeratin 7 can be extremely helpful for reducing recurrences when performing Mohs surgery on patients with extramammary Paget's disease, Dr. John Zitelli said at the annual meeting of the American Society for Dermatologic Surgery.

"Although I don't have enough patients in the last 2 years to give you long-term follow-up, there is no doubt in my mind that this is the way to go," Dr. Zitelli said.

Without the stain, a review that included his own patients treated over a period of 20 years showed a recurrence rate of about 20%, said Dr. Zitelli, a former president of the American College of Mohs Micrographic Surgery and Cutaneous Oncology who practices in Pittsburgh.

Although all of the patients who had recurrences did well eventually, the recurrence rate probably indicates that he was missing individual Paget cells around the nests of tumor of the main lesion. The stain makes those individual cells in a frozen section easy to see without extra magnification, he said.

Cytokeratin 7 is a filament protein expressed by cancers in the epithelia.

"My kids could see it," he said of stained, individual cells in a section.

The staining technique using the cytokeratin 7 stain requires only 1 hour, so a case requiring multiple stages can be done in a single day, he added.

To remove Paget's disease using the Mohs technique, Dr. Zitelli uses the exact same method he helped develop for MART(melanoma antigen recognized by T cells)-1 staining of melanoma (Dermatol. Surg. 2004;30:403-8).

He also uses a "strip technique" in part because the lesions tend to be rather large (20-30 mm in diameter), which can make them difficult to section. With this technique, he outlines the lesion before cutting. His first stage is to take the margin around where he has marked. Once the margins are clear, he goes back and takes the central island of tissue, and all tissue is taken down to the fat. ■

Zinc Paste May Help Halt Mohs Recurrences, Despite Its Dangers

BY TIMOTHY F. KIRN
Sacramento Bureau

San Diego — Dr. Daniel Siegel applies the zinc chloride paste developed by Dr. Frederic E. Mohs to melanomas the day before he removes them as a kind of insurance policy to reduce the risk of recurrence.

"The paste is wonderful stuff," Dr. Siegel said at a course on Mohs surgery during a meeting sponsored by the American Society for Mohs Surgery.

The paste is not commercially available, but it can be compounded by a pharmacy. Dr. Mohs himself eventually abandoned its use in favor of the fresh tissue technique in the 1950s. In addition to zinc chloride, the paste contains bloodroot (*Sanguinaria canadensis*) and stibnite, and a little bit lasts a long time. A single jar has lasted about 10 years, he said.

It has not been possible to get a clinical trial of the paste organized because there is no commercial interest, but there is some evidence to suggest its efficacy, said Dr. Siegel, a dermatologist practicing in Smithtown, N.Y.

Dr. Mohs reported better 5-year survival rates for melanoma than are usually reported, even better than those reported by Dr. Wallace H. Clark, originator of the Clark's levels of invasion. He reported 5-year survival of 57% for melanoma patients with a Clark's level III tumor, but Dr. Mohs reported 92%, Dr. Siegel said.

In an experiment with mice that Dr. Siegel was involved in, the investigators reported a markedly positive effect when mice were treated with the paste and then injected with melanoma cells. The mice had melanomas treated with the zinc oxide paste then removed 24 hours later. A second group of mice simply had melanomas excised. Then all the mice were injected in a second site with melanoma cells. Melanomas developed at the challenge site in 69% of the mice treated with excision only, but just 32% of the mice treated with paste (Dermatol. Surg. 1998;24:1021-5). The researchers concluded that the paste was enhancing some kind of immune response.

When Dr. Siegel uses the paste in his practice, he said he is careful to fully inform patients that the treatment is not proven. He also lets them know it is very uncomfortable, and he often uses anesthetic.

Dr. Siegel applies a 50% trichloroacetic acid solution to the lesion before applying the paste, which is painful. Patients often come in the next day complaining that they have a temperature and that their lymph nodes are sore. He then does a wide excision despite the paste, he said.

It is important to warn patients not to touch the lesion and get the paste in an eye. "You have to be very careful and fearful," he said. "Paste can be dangerous."

Despite that, it may be advantageous to use the paste for patients who may be infectious, such as those who are HIV positive, because it probably minimizes infectious agent "splatter," he added.

Most importantly, there is no reason to believe that the use of the paste may be harmful, since the tumor is being removed anyway, Dr. Siegel said.

In fact, he is not the only Mohs surgeon who uses the paste for melanoma cases.

Dr. Kenneth Gross of San Diego, one of the organizers of the Mohs course, said that he has used it for patients who are having a sentinel node procedure.

"Do I know this is helping? I absolutely do not. [But] we are killing and immobilizing cells and I don't see how that could be any problem," he said. ■