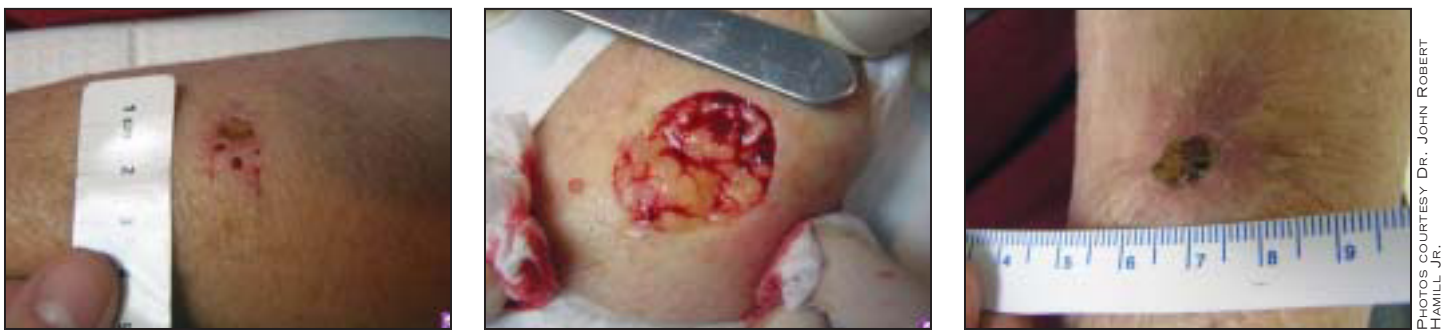
Purse-String Closure Best Choice for Difficult Cases

BY NANCY WALSH
New York Bureau

PALM BEACH, FLA. — Purse-string closure is a useful technique for difficult postsurgical cases in patients who cannot tolerate long procedures or who have difficulty with follow-up, according to Dr. John Robert Hamill Jr.

This technique also minimizes scarring, especially in areas of high tension or thin skin, with the final scar almost always being significantly smaller than the original defect, Dr. Hamill said at the annual meeting of the Florida Society of Dermatologic Surgeons.



PHOTOS COURTESY DR. JOHN ROBERT HAMILL JR.

The lower left arm of the elderly nursing home patient with malignant melanoma in situ is shown before excision (left); immediately following excision (middle); and 2 weeks after surgery (right). The patient was "perfectly healed" and happy.

Purse-string closure of defects after surgery for skin cancer—with sutures placed around the defect and the skin pulled together—is cost effective. "I charge for intermediate closure for this procedure, eliminating the need for flaps, grafts, and multiple staged procedures," said Dr. Hamill of the department of dermatology and cutaneous surgery at the University of South Florida, Tampa.

For example, this was suitable for an elderly nursing home patient with malignant melanoma in situ on the left lower arm (see images above).

"The patient had multiple medical problems, and both she and her daughter wanted almost no surgery, so I did the simplest thing I could," said Dr. Hamill, director of the advanced dermatology surgery clinic at James A. Haley Veterans' Hospital, Tampa, and medical director at Gulf Coast Dermatology, Hudson, Fla.

The original 2.8-by-2.9-cm defect was closed with nylon skin sutures at the concentric redundant skin folds, and the final 0.7-by-0.5-cm defect left to granulate. "The skin here is bunchy, but in this type of patient you can get away with that because the skin is so loose. The puffiness will go down," he said.

Two months later, there was a small amount of breakdown and granulation tissue in the center of the defect, which was debrided in standard fashion with curetting, electrocautery, and topical aluminum chloride. Once the crust was scraped off the dermis was perfect, Dr. Hamill said at the meeting.

Because of the patient's complex medical problems she was unable to return for further follow-up, but a phone call to the nursing home determined that she was "perfectly healed and perfectly happy," he said.

"This is the type of surgery I would want my own grandmother to have because of its simplicity and lack of complications," he said.

The main disadvantages of the purse-string closure are the marked distortion of the skin immediately following the surgery and the possibility that simple scar revision may be needed in areas of high tension. But with a careful preoperative discussion, and the patient's being shown photos of other patients' outcomes, these are generally not major problems.

"In general, my patients have been extremely happy with this technique," Dr. Hamill concluded. ■

Common Dermatologic Surgery Beliefs Dispelled by Expert

BY NANCY WALSH
New York Bureau

PALM BEACH, FLA. — Certain widely held beliefs among dermatologic surgeons are revealed as myths when subjected to scientific scrutiny, according to Dr. James M. Spencer.

"In surgery we do a lot of things just because a respected professor once told us to," said Dr. Spencer of Mount Sinai School of Medicine, New York.

An example Dr. Spencer cited is the dictum that one should never use epinephrine with lidocaine on the fingers, because the epinephrine is so vasoconstrictive that hypoxia and necrosis would result. This prohibition is included as dogma in textbooks—yet a literature review identified only 50 reported cases of digital gangrene following local anesthesia. All of these were early 20th century cases and multiple medications were involved, including cocaine and procaine, with nonstandardized techniques and methods of mixing, he said.

These early cases also included the inappropriate use of tourniquets and postoperative hot soaks (J. Am. Acad. Dermatol. 2004;51:755-9). There have been no reports of necrosis of the finger since commercial lidocaine with epinephrine was introduced in 1948, Dr. Spencer said at the annual meeting of the Florida Society of Dermatologic Surgeons.

Another myth is that dog-ears must be completely removed at the time of surgery or they will be permanent. "I was taught 'thou shalt not leave dog-ears,' but this is clearly untrue," he said.

"When I had my first job at the University of Miami, the chairman of the department of plastic surgery would do primary repairs leaving patients with dog-ears. I wondered why no one had ever told him not to leave dog-ears, but then I thought, what are the chances of me being right and the chairman of plastic surgery being wrong? Zero," he said.

When this was studied prospectively, in 43 postexcision dog-ears in 26 patients, some degree of regression was seen in all

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DR. SPENCER

43. The dog-ears were measured immediately postoperatively and followed for up to 180 days. Complete regression was seen in 19 of the 43, over a mean of 132 days, and the probability of complete regression was greater in dog-ears of 8 mm in height or less (Dermatol. Surg. 2008;34:1070-6).

"I can tell you from experience that dog-ears on hands regress completely, those on arms and legs do pretty well, but those on the forehead not at all," he said.

"We also were all taught that nonabsorbable sutures are always preferred as outer, cuticular sutures because absorbable sutures are too inflammatory, they favor infection, and give an inferior cosmetic result," he said.

Patients, however, would prefer not to have to return for suture removal, so a group of emergency physicians performed a study in which they randomized pediatric patients with lacerations to treatment with absorbable plain gut sutures or nonabsorbable nylon sutures and evaluated them at 10 days and at 4-5 months.

At 10-day follow-up, there were no differences in wound outcome, including infection and dehiscence rates, and 4-5 months later, evaluation by a blinded plastic surgeon showed no difference in cosmetic outcome (Acad. Emerg. Med. 2004;11:730-5). "In fact, the plain gut sutures appeared to give a slightly better cosmetic result," said Dr. Spencer, who also is in private practice in St. Petersburg, Fla.

Another myth that has been perpetuated by dermatologists is that patients receive 80% of their lifetime sun exposure by age 18.

The 80% number was an extrapolation from a calculation in 1986 that sunscreen use by young people would reduce their lifetime risk of skin cancer by 78%. In fact, the original publication stated that the incidence of nonmelanoma skin cancer was related to the square of the ultraviolet dose—the actual dose was not calculated (Arch. Derm. 1986;122:537-45).

A more recent analysis determined that Americans actually receive less than 25% of their total exposure by age 18 (Photochem. Photobiol. 2003;77:453-7). "This, of course, means that sun protection is equally important in older and younger patients," he said.

Finally, it has been accepted that laser resurfacing is contraindicated while a patient is on isotretinoin, but there is very little evidence to support this, with only nine cases of keloid scarring having been reported. Six were from Dr. Henry Roenigk in Chicago, who has done thousands of cases of dermabrasion on patients with acne scars who were on isotretinoin or had only recently discontinued it (J. Am. Acad. Dermatol. 1986;15:280-5). The remaining three were patients from Great Britain who developed scarring after dermabrasion or argon laser while taking isotretinoin (Br. J. Dermatol. 1988;118:703-6).

"That's it. Nine patients in the world literature have become a medicolegal fact. Textbooks don't even reference it, they just state it like it's the 11th commandment."

Dr. Spencer disclosed having no conflicts of interest relevant to his presenation. ■

UPCOMING MEETINGS

The American Society of Dermatopathology

American Society for Dermatologic Surgery

Skin Disease Education Foundation's Las Vegas Dermatology Seminar