

# Expert Offers Practical Nail Surgery Pearls

BY ROBERT FINN  
San Francisco Bureau

MONTEREY, CALIF. — Nail surgery can be fun, and dermatologists are perfectly positioned to offer this treatment to patients, Dr. Stuart J. Salasche said at the annual meeting of the California Society of Dermatology and Dermatologic Surgery.

"The hand surgeons don't want nail surgery, and the plastics people don't want nail surgery, so it's ours," said Dr. Salasche of the University of Arizona Health Sciences Center, Tucson. He offered several pearls that reflect his years of experience:

► When a finger injury causes a hematoma, the blood normally collects under the proximal portion of the nail plate, where it's loose, and cannot progress further up the nail bed. A simple way of treating this short term is just to unfold a paper clip and heat the end. Touch the heated end to the nail plate and it sizzles right through, releasing the hematoma.

► Similarly, with acute paronychia, which is often caused by a staph infection, take a No. 11 blade and insert it into the lateral nail fold, releasing the pressure. "Generally a patient feels relief immediately," Dr. Salasche said.

► For more complex surgeries, such as nail avulsions and matricectomies, Dr. Salasche has two favorite instruments. The Freer septum elevator is critical in both proximal and distal approaches to nail avulsion. The English nail splitter is useful for partial nail avulsions. It has an anvil-like undersurface that slides between the nail bed and the nail plate and a scissorlike upper portion for cutting through the nail plate.

► For anesthesia, most nail surgery requires a nerve block, then a distal block, followed by a local injection. The dorsal digital nerve and the proper palmar digital nerve run along the lateral portion of the finger. Dr. Salasche injects about 1 cc of 2% lidocaine (without epinephrine and using a 30-gauge needle) into the medial side of the finger above the metacarpophalangeal joint. "I don't go down to the bone, and I don't march around," he said. "I just inject slowly until I balloon up the area and let the anesthetic diffuse down to the nerves. It's much less dangerous that way." After 10 minutes he uses the same needle to inject into the proximal lateral nail fold area. Once again waiting until the patient is comfortable, he then injects a local anesthetic into the distal area. This injection contains epineph-

rine to promote local vasoconstriction.

► Both distal and proximal approaches are possible for nail avulsion, depending on the patient. For the distal approach Dr. Salasche inserts the septum elevator under the nail tip, which takes some force. He pushes the elevator proximally as well as up underneath the nail plate to avoid digging down into the nail bed. When the elevator reaches the matrix, the force required will suddenly decrease, and the physician should take care not to jam the instrument back into the cul de sac of the proximal nail groove. Then the physician could either rock the elevator back and forth to loosen the rest of the nail or remove the elevator and reinsert it. Dr. Salasche prefers the latter technique because rocking the elevator back and forth tends to cause bleeding. After he has inserted the elevator several times, he uses the elevator on the nail plate's proximal edge to go back underneath the cuticle into the proximal nail fold, loosening any attachments back there. Then it's possible to grasp the nail with a hemostat and pull it off, snipping any remaining small attachments with a pair of scissors.

► If the patient's nail is so damaged that it has no distal free edge to get underneath, it's better to use a proximal approach. Take the septum elevator and come up underneath the proximal nail fold. Fulcrum this over to get underneath the newly developing nail and then run it out and up. There's a danger that one could damage the nail bed, so it's important to direct the elevator both distal and up underneath the surface of the nail bed.

► Ingrown nails respond well to a partial nail avulsion followed by a partial matricectomy. After removing the portion of the nail that's ingrowing, Dr. Salasche uses phenol to destroy the part of the nail matrix responsible for generating that part of the nail. He likes to make his own cotton-tip applicator by taking a sturdy, double-pointed toothpick and twisting some cotton around the top. It's important to use fresh, full-strength (88%) phenol. He dips the applicator into the bottle of phenol, removes excess liquid by holding it against the side of the bottle, and then applies it directly to the matrix, where he leaves it in place, rotating it for about 30 seconds. ■

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## PDLs Equally Good for Scar Ablation

NEW ORLEANS — The pulsed dye lasers 585 nm and 595 nm are equally effective in surgical-scar ablation, Maria P. Rivas, M.D., reported at the annual meeting of the American Academy of Dermatology.

Although there were no significant histologic or clinical differences between the treated sites, the sites treated with the lower-fluence laser showed slightly more elastic fibers and slight advantages in pliability, vascularity, and scar height, said Dr. Rivas of the department of dermatology and cutaneous surgery at the University of Miami.

She and her colleagues examined outcomes on 19 linear postsurgical scars greater than 3 cm; the scars occurred on 14 patients aged 18-85 years. Their skin types were I-IV. A blinded examiner evaluated the scars on suture-removal day and after treatment using the Vancouver Scar Scale, which assesses pigmentation, vascularity, pliability, and height. The investigators also rated the scars for cosmetic appearance using a cosmetic visual-analog scale.

Each scar was divided into three equal segments. The center segment was left untreated, and the outer segments were randomized to treatment with either pulsed dye laser (PDL) 585 nm or 595 nm (10-mm spot size, 3.5 J/cm<sup>2</sup>).

Each scar was treated once a month for 3

months, and final assessment was made 1 month after series completion.

At that time, sites treated with the 585-nm PDL showed slightly more elastic fibers on histology than did sites treated with the 595-nm PDL.

All treated sites showed a greater improvement than control sites on the Vancouver Scar Scale. The control sites showed an average 32% improvement, the 595-nm sites showed an average 55% improvement, and the 585-nm sites showed an average 67% improvement. The difference between the treated sites was not statistically significant.

All the Vancouver Scar Scale parameters were more improved on the treated sites than on the control sites, with vascularity and pliability showing the greatest improvements. All treated sites scored significantly higher than the untreated sites on the cosmetic visual-analog scale. Again, the 585-nm sites score slightly higher than the 595-nm sites, but not significantly so.

—Michele G. Sullivan



Comparison of efficacy of 585-nm vs. 595-nm pulsed dye laser on treating surgical scars is shown on suture removal day.