

# Surgeons Have Numerous Rhytidectomy Choices

*The best technique should balance the efficacy of the lift with a low rate of suture extrusion.*

BY KATE JOHNSON  
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PHOENIX — In the face of myriad short-scar rhytidectomy techniques, suture extrusion rates and efficacy of lift are two variables that can help surgeons identify their preferred approach, Dr. Neil Tanna said at the annual meeting of the American Academy of Cosmetic Surgery.

Although secure suspension of the superficial musculoaponeurotic system (SMAS) is indispensable for effective results, there are numerous SMAS suspension techniques and no consensus on which is superior, said Dr. Tanna, who is a resident in otolaryngology and head and neck surgery at George Washington University in Washington.

"Surgeon preference is usually based on the efficacy of the achieved lift and the rate of suture extrusion," he said in an interview, explaining that suture extrusion disrupts the biomechanical properties of the manipulated tissue.

**Loss of deep tissue support means an increase in wound tension and an increased risk of necrosis, scarring, trophic changes, and contour defect.**

"With the loss of deep tissue support, there is an increase in wound tension and an increased risk of necrosis, scarring, trophic changes, and contour defect," Dr. Tanna said.

His retrospective study compared 1,850 short-scar rhytidectomies performed by one surgeon between January 2002 and January 2006, with the primary outcome being the rate of suture extrusion. All patients also received cervicofacial liposuction at the time of the surgery and were divided into six groups based on the type of SMAS plication they underwent.

In group A, 100 patients received O-shaped purse-string sutures (2-0 Ethibond). For the 100 patients in group B, both O-shaped and U-shaped purse-string sutures (2-0 Ethibond) were used. Interrupted horizontal mattress sutures were used for the 50 patients in group C (2-0 Ethibond), 50 patients in group D (2-0 Vicryl), and 50 patients in group E (2-0 Mersilene). Group F included 1,500 patients in whom a two-layer running locked plication stitch was



This patient is undergoing the two-layer running locked superficial musculoaponeurotic system plication with a braided, nonabsorbable suture.

used with a braided, nonabsorbable suture (2-0 Mersilene).

After at least 6 months of follow-up, the patients were compared in terms of rate, type, and location of suture extrusion.

Group A had a 5% rate of suture extrusion, compared with 8% for group B, 6% for group C, and 1.2% for group F, reported Dr. Tanna. Although groups D and E had no suture extrusions, he concluded that patients in group F had

achieved the best overall outcome in terms of both lift and a low rate of suture extrusion.

Although the study didn't formally "evaluate the efficacy of the achieved lift while looking at suture extrusion ... anecdotal experience suggests that the two-layer plication stitch employing a braided nonabsorbable suture allows an effective SMAS suspension with a tolerable rate of suture extrusion," he said. ■

## Laparoscopic Technique Can Release Large Subcutaneous Scars

BY KATE JOHNSON  
Montreal Bureau

PHOENIX — Large, depressed abdominal scars that complicate liposuction can be safely removed using "a novel technique" involving standard laparoscopic scissors, Dr. Marco A. Pelosi II said at the annual meeting of the American Academy of Cosmetic Surgery.

The technique has no laparoscopic component, he said in an interview, and following his success with standard laparoscopic scissors in this study, he has since designed the Pelosi Liposcar scissors, which are specifically intended for this purpose.

Surgical scars that do not involve direct adherence of the dermis to the muscle fascia are relatively simple to manage at the time of liposuction using either small-

diameter liposuction cannulas or V-tip dissector cannulas, Dr. Pelosi said. However, more complicated scars that involve the aponeurosis cannot be eliminated using these tools.

In a study of 20 consecutive patients who required release of such depressed abdominal scars prior to office liposuction, standard laparoscopic scissors were safe and effective, reported Dr. Pelosi, who is a gynecologist in Bayonne, N.J.

Computed axial tomography scans of all scars were performed preoperatively to rule out incisional hernias, and all surgeries were performed under tumescent anesthesia.

The laparoscopic scissors were introduced through a 3- to 4-mm incision parallel to the skin surface in the superficial subcutaneous layer and advanced toward the scar.

As soon as fibrotic resistance was encountered, the operator's free hand was used to stabilize the area while the other hand moved the scissors in "a lancing and fanning motion" to cut the subcutaneous fibrotic strands, Dr. Pelosi explained.

The scissors were then directed into the deep dermis to cut the fibrotic strands attached to the muscle fascia. Finally, the scissors were used to feel and release any remnants of fibrotic tissue holding the scar. After full release of the scar, standard liposuction was performed.

Complete release of the scar was achieved in all of the study subjects without any intraoperative or postoperative complications.

At 12 months post procedure there was no evidence of recurring subcutaneous fibrotic strands, he said. ■



This depressed scar, caused by three previous laparotomies, can be released with standard laparoscopic scissors.



The scar has been safely and fully released in preparation for liposuction.

### Number of Selected Inpatient Procedures in 2004

Cardiovascular system	6,993,000
Digestive system	5,824,000
Musculoskeletal system	4,040,000
Integumentary system	1,498,000
Nervous system	1,291,000
Respiratory system	1,045,000
Urinary system	963,000
Nose, mouth, and pharynx	309,000
Eye	71,000
Ear	45,000

Source: National Center for Health Statistics