spreader grafting during rhinoplasty. The aim of this study was to utilize previously validated measures to assess objective, functional outcomes in patients who underwent open and closed rhinoplasty with spreader grafting.

**METHODS:** We performed a retrospective review of consecutive rhinoplasty patients. Patients with internal nasal valve insufficiency who underwent an open or closed approach functional rhinoplasty between 2007 and 2016 were studied. The Cottle test and NOSE survey was used to assess nasal obstruction. Patient reported symptoms were recorded. Acoustic rhinometry was performed pre- and postoperatively. Average minimal cross-sectional area (CSA) of the nose was measured.

**RESULTS:** There were 178 patients reviewed over a period of eight years. Thirty-eight patients were included in this study. Of those, thirty patients underwent closed rhinoplasty and eight underwent open rhinoplasty. Mean age was 36.9 ± 18.4 years and mean BMI was 24.8 ± 4.4 kg/m². The average CSA (Powered by Editorial Manager® and ProduX-ion Manager® from Aries Systems Corporation) in the sides that underwent spreader grafting significantly increased from 0.63 ± 0.29 cm² to 1.01 ± 0.78 cm² (0.38 ± 0.78, p=0.018). Separating patients into subgroups of open or closed rhinoplasty with spreader grafting revealed a significant increase in CSA in the open group 0.58 ± 0.31 to 1.15 ± 0.95 (0.57 ± 0.81, p=0.019). There was also an non-statistically significant increase in CSA in the closed group but not statistically significant (0.68 ± 0.26 to 0.87 ± 0.56 (0.20 ± 0.65, p=0.60)). There was a statistically significant difference in the increase in CSA for open vs. closed rhinoplasty with spreader grafting (0.57±0.81 to 0.20±0.65, p=0.011). There was a functional improvement in all presented cases using the NOSE scale evaluation.

**CONCLUSION:** Open and closed rhinoplasty with spreader grafting may play a significant role in the treatment of nasal valve collapse. There appear to be objective outcome differences in for two approaches. Closed rhinoplasty with spreader grafting has satisfactory patient reported outcomes.

**Efficacy and Safety of N1539, Intravenous Meloxicam, in a Phase 3 Study of Subjects with Moderate to Severe Pain Following Abdominoplasty**

**Presenter:** Matthew Bindewald, MD

**Co-Authors:** Sonia Singla, DO; David Leiman, MD; Barr Baynton, DO; Harold S. Minkowitz, MD; Stewart McCallum, MD; Randall Mack, BS; Rosemary Keller, PhD; Alex Freyer, PharmD, Wei Du, PhD

**Affiliation:** MGB Plastic Surgery Associates of San Antonio, San Antonio, TX

This Phase 3, multicenter, randomized, double-blind, placebo-controlled trial evaluated the efficacy and safety of N1539 in 219 subjects with moderate to severe pain following abdominoplasty. Subjects were enrolled and randomized to treatment (1:1 ratio) with N1539 30 mg or placebo administered via IV push every 24 hours for up to three doses. N1539 is a novel intravenous (IV) formulation of NanoCrystal Colloidal Dispersion® meloxicam, a nonsteroidal anti-inflammatory drug (NSAID), developed for the management of moderate to severe pain.

Baseline characteristics were similar between groups, with a mean pain intensity (numeric pain rating scale, 0–10) of 7.2 in the N1539 group and 7.4 in the placebo group. In the primary efficacy assessment, N1539 demonstrated a statistically significant reduction in the summed pain intensity difference (SPID) through 24 hours following Dose 1 (SPID₁₂; p=0.0145) compared to the placebo group. Statistically significant reductions in SPID were also observed through 12 hours (SPID₁₂; p=0.0434) and 48 hours post Dose 1 (SPID₄₈; p=0.0040) compared with placebo. The study achieved numerous other secondary endpoints, including statistically significant differences in time to perceptible pain relief (p=0.0050), number of subjects with ≥30% improvement in pain reduction at 24 hours (p=0.0178), number of times subjects required rescue analgesia in the first 24 hours (p=0.0275) and from 24 to 48 hours (p=0.0009), along with other pain endpoints.

The safety results demonstrated that N1539 was well tolerated with no difference in adverse event (AE) reporting between the groups. Two serious AEs (SAEs) related to bleeding were reported (one event in each treatment group), with two additional SAEs reported in the placebo group. The most common (≥2%) treatment-emergent AEs (TEAEs) in N1539 treated subjects were nausea, headache, vomiting, and dizziness, which
were observed at a lower incidence than in the placebo group. The majority of TEAEs were mild in intensity, with one subject discontinuing treatment due to an SAE of post-procedural bleeding (placebo). Investigator assessments of satisfaction with wound healing and various wound characteristics were comparable between N1539 and placebo groups. There were no meaningful differences between treatment groups in vital signs, ECGs, or clinical laboratory assessments.

The data from this study demonstrated that N1539 provided significant pain relief in subjects with moderate to severe pain following abdominoplasty surgery, with a favorable safety and tolerability profile.

Secondary Full Abdominoplasty Following Prior Umbilical Stalk Detachment

**Presenter:** Riley Dean, BS  
**Co-Authors:** John A. Dean, MD; Alan Matarasso, MD  
**Affiliation:** McGovern Medical School, Houston, TX

**INTRODUCTION:** There are many techniques utilized in abdominoplasty surgery. For patients presenting with primarily infraumbilical laxity in addition to a small amount of laxity above the umbilicus, an umbilical “floating” maneuver can be used as a modification of a mini-abdominoplasty. Patients with prior umbilical stalk detachment, secondary to modified mini-abdominoplasty or prior umbilical hernia repair, occasionally desire full abdominoplasty. In these patients, a circumferential incision around the umbilicus leaves a blood supply based entirely upon scar tissue, prompting concern about the viability of the umbilicus. Minimal literature exists to help guide clinical decision-making for these patients.

**METHODS:** Queries were sent to Louisiana Society of Plastic Surgery members as well the Plastic Surgery Education Network (PSEN) online forum. Case information was gathered via email and telephone correspondence. Metrics obtained included patient age, time between umbilical stalk detachment and secondary full abdominoplasty, post-operative complications, and if rectus plication was performed at time of secondary surgery.

**RESULTS:** Ten physicians reported 16 substantive cases, including twelve following mini-abdominoplasty and four after umbilical hernia repair. All patients healed without evidence of umbilical necrosis. Average patient age at time of secondary surgery was 37.5 years. Average duration between procedures was 3.8 years. 69% of patients had the umbilicus delayed prior to secondary procedure, with average delay time being 16 days. Rectus fascia was plicated at time of secondary surgery in 69% of patients.

**CONCLUSION:** This is the largest series of patients undergoing full abdominoplasty after prior umbilical stalk detachment. It is also the first time the PSEN online forum has been used to collect research data, highlighting its potential as a valuable research tool. The data set thus allows for consideration of various solutions when this clinical scenario is encountered.

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A Study on the Length of Flap in the Thigh for Abdominal Wall Reconstruction

**Presenter:** Haruo Ogawa, MD  
**Co-Authors:** Shinya Tahara, MD, PhD; Misako Morita, MD  
**Affiliation:** Japanese Red Cross Kobe Hospital / Hyogo Emergency Medical Center, Kobe

**INTRODUCTION:** A pedicled or free tissue thigh flap has been used for large abdominal