each subgroup, however there was no consistent preference for a particular configuration when subgroups were combined. While tendinous intersection definition is an important feature of the aesthetic muscular abdomen, there appears to be no particular tendinous intersection configuration that is significantly more preferred.

Abdominoplasty with Lymphatic Microsurgery for Patients with Lower Extremity Lymphedema

Presenter: Shinsuke Akita, MD, PhD
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INTRODUCTION: Patients with secondary lower extremity lymphedema (LEL) often develop suprapubic lymphedema. A majority of the cases have midline abdominal scars, with ventral herniation also observed. We developed a novel surgical method of shaping the lower abdomen and debulking suprapubic lymphedema with simultaneous reconstruction of lymphatic flow in case of LEL.

METHODS: A skin incision in a fleur-de-lis pattern was performed for horizontal and vertical abdominal skin and fat resection. A caudal-based isosceles triangular flap was created on the central suprapubic region to reduce wound tension at the intersection of the horizontal and vertical incisions. After resection and debulking of the suprapubic region, in cases with a ventral hernia, the hernial orifice was repaired directly and a monofilament polypropylene mesh. Thereafter, lymphaticovenular anastomosis (LVA) between the efferent lymphatic vessel of the groin node and the superficial inferior epigastric vein was created or vascularized lymph node transfer (LNT) to the groin region was performed to restore lymphatic flow. LVA and LNT were also performed at the lower extremities to improve LEL. Perioperative change in limb volume was evaluated using the LEL index, and lymphatic function was evaluated by lymphoscintigraphy.

RESULTS: Simultaneous abdominoplasty and reconstructive lymphatic microsurgery were performed in 11 patients. The LEL index improved perioperatively, with a significant difference (p < 0.01). In eight patients who underwent lymphoscintigraphy before and after surgery, the lymphatic function was found to have not deteriorated in any limb.

CONCLUSION: When simultaneous lymphatic microsurgeries and careful observation for complications were performed, abdominoplasty resulted in good outcomes in patients with LEL and suprapubic lymphedema without worsening of lymphedema.

Outcomes and Safety of Performing Abdominoplasty in Non Bariatric Obese Patients

Presenter: Joseph Batac, MD
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INTRODUCTION: The incidence of obesity is on the rise in the United States and worldwide. Many surgeons elect not to perform abdominoplasty on patients with a high body mass index (BMI), fearing an increased their risk of perioperative complications. In this study, the authors compare the outcomes of patients who underwent abdominoplasty and had elevated BMI to those who were not obese.

METHODS: A retrospective chart review was performed. The records of all patients from a single surgeon who underwent abdominoplasty from 2009 to 2016 were reviewed. Complication rates were compared in obese and non-obese patients. Patients were excluded if they did not have a full abdominoplasty, had combined surgical procedure or had liposuction in an area outside of the abdomen or flanks at the time of the abdominoplasty.

RESULTS: A total of 79 patients were included: 62 non obese and 17 obese. The obese group had
a higher BMI (35.3 kg/m² versus 25.1 kg/m²; p < 0.001). Follow up time was similar (280 days versus 265 days; p= 0.905). No statistically significant differences were seen in regards to perioperative seroma formation (11.7 percent versus 22.5 percent; p = 0.335), surgical site infection (11.76 percent versus 8.06 percent; p= 0.656), Wound dehiscence (5.8 percent versus 11.29 percent; p= 0.520) or hematoma formation (5.8 percent versus 1.6 percent). No instances of venous thromboembolism were observed in any of the patients.

CONCLUSION: Abdominoplasty, with or without concurrent liposuction, in obese patients is a safe and effective procedure with similar perioperative complication rates as the non-obese patient population. No significant differences were observed in regards to perioperative complications.

Comparing Results of Four Patterns of Skin Incision of Abdominal Flap for the Umbilicoplasty during Abdominoplasty

**Presenter:** Heloisa Tezzoni Rodrigues, **MD**

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**INTRODUCTION:** Many techniques of abdominal skin incision for repositioning umbilical stalk during abdominoplasty are used nowadays. Although they generally give good appearance to the neoumbilicus, minor shape variations may occur. Thus, it is proposed an unpublished study that aims to analyze the opinion of 3 groups of people from different socioeconomic status regarding the aesthetic post-operative result of four techniques of umbilicoplasty obtained during primary abdominoplasty.

**METHODS:** It was proposed a retrospective study with 304 women that underwent aesthetic abdominoplasty between 2012 and 2015. Chart review and photographic evaluation of umbilical scar of these women after a 6-month post-operative period was carried out. Three groups of referees were established. One composed by 3 plastic surgeons (PSG), one by 3 graduated-people in non-medical area (GNG), and one composed by three people that completed only elementary school education (ESG). Each referee scored the patient from 1 (unsatisfactory) to 3 (great outcome), and the sum of the 3 referees in each group gave the final individual score (from 3 to 9). The pattern of abdominal skin incision for neoumbilicoplasty was: resection of a 2x1cm fragment of skin in a vertical way (VR), horizontal resection of a 2x1cm fragment (HR), “V” inverted skin flap (IVF), and a “Y” shape incision (YI). Nominal variables were analyzed by Chi-squared tests and ordinal variables by one-way ANOVA. The agreement among referees was measure through Cohen’s Kappa test.

**RESULTS:** Only 85 women met all the inclusion criteria. The average age was 43 year-old (25–64). The techniques used were HR (56.5%), VR (24.7%), IVF (11.8%) and YI (7.1%). 22 complications were identified, scar hypertrophy was the most frequent (36.4%), followed by stenosis (18.2%). These healing problems were more prevalent in HR group (p=0.48). People race, previous comorbidities, liposuction local trauma during abdominoplasty and smoking were not a risk factor for any complication (p>0.05) in this study. The photographic evaluation showed similar results for all groups. The mean score of PSG, GNG and ESG were respectively, 5.49 (5.38 to 5.81, k=0.42), 4.75 (4.50 to 5.10, k=0.64), and 5.39 (4.50 a 5.90, k=0.56).

**CONCLUSION:** Although HR was associated with healing problems in this study, no technique was able to show a superior aesthetic quality result regarding the opinion of people from groups of different socioeconomic status.

The Ideal Buttock Size: A Sociodemographic Morphometric Evaluation

**Presenter:** P. Niclas Broer, **MD**, **PhD**

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