EXPERIENCE WITH ADDED PROCEDURES IN COMBINATION WITH AN ABDOMINOPLASTY AND/OR BODY LIFT

ACPS The Aesthetic Center For Plastic Surgery

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PURPOSE

Present the clinical experience of patients undergoing added procedures in combination with an abdominoplasty and or body lift. Discuss the potential options and benefits in maximizing results in one single stage. Optimize safe and effective surgery in a single operative setting versus a series of delayed procedures.

MATERIALS AND METHODS

There were 221 patients undergoing abdominoplasty and or body lift surgery combined with other procedures. They were operated upon by the lead author between January 1998 and December 2003 primarily at the ACPS Surgicentre, a fully-accredited (AAAASF) outpatient center. Multiple additional procedures were performed, including: tumescent suction assisted lipectomy of the trunk, hips, flanks and thighs; mastopexy; breast augmentation; breast reduction; brachioplasty; thigh lift; hip lift; hernia repair; lower body lift; and various autologous fat grafting procedures.

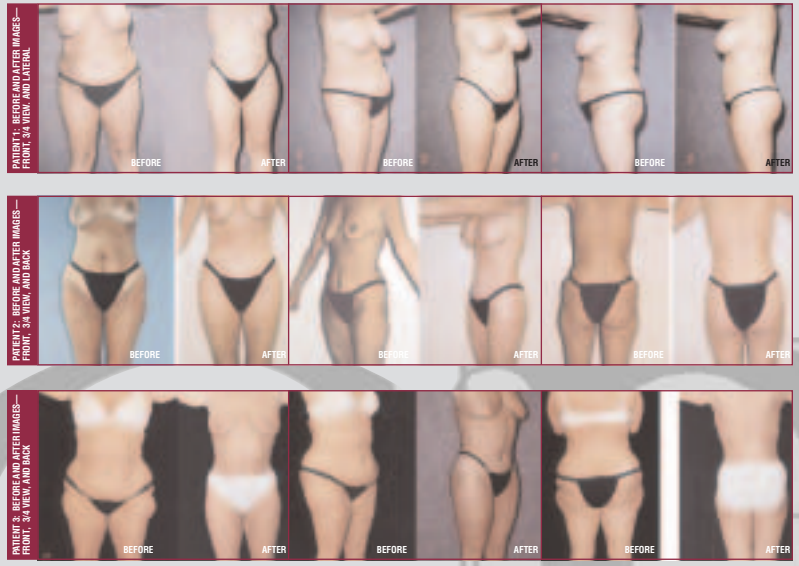
These procedures were performed under general anesthesia with traditional, straightforward techniques and were based on standard principles.

RESULTS

In this study of 221 consecutive abdominoplasty/body lift procedures, patients underwent a variety of additional procedures facilitated during the same operative session. There were 5 major complications, with a complication rate equal to the one reported in the literature. The most serious complications encountered were: pulmonary embolus (1), severe infection (1), and deep venous thrombosis (3). There were no significant skin flap losses or major dehiscence events. Minor wound separation of less than 2cm and suture abscesses occurred, but are not reported as significant complications.

Our findings were:

- In order to avoid vascular compromise, we do not recommend concomitant liposuction of the abdominal flap during a standard abdominoplasty, particularly in the portion of the skin flap that has been elevated. Liposuction of the upper abdomen is performed with a mini abdominoplasty procedure, whereby only the lower abdominal skin up to the umbilicus is elevated.
- A higher level of patient satisfaction is achieved by accomplishing restoration of body contour in one operative session with one recovery period. Generally, patients are less able to take off work for more than a two-week period during the same year, and they prefer a single operative setting.



- Combined lipocontouring of the hip/flank region provides a more aesthetic contour of the waist and abdomen as the lateral extension of the abdominoplasty can be more effectively tapered to achieve a balanced effect.
- In this study, 88% of patients had suction-assisted lipectomy of the thighs, hips, and flanks.
- All patients were ASA I or ASA II of the anesthesia risk classification.
- All patients had sequential pneumatic compression devices utilized during the entire operative period and for over 12 hours post-operatively.
- All patients were given a multivitamin program (Vitamedica), prophylactic antibiotics, anti-bruising medication (Arnica/Bromelain), and compression garments.
- 90% of of patients were monitored post-operatively for 23 hours prior to discharge. Monitoring included: vital signs, urine output, drain output, wound inspection, parenteral pain management, parenteral nausea control and oral intake assessment.
- The overall aesthetic results are far superior when body proportion and shape are considered for contouring when redundant atrophic skin is removed during body lift and or abdominoplasty procedures.
- Post-operative wound management has evolved over time, and the present regimen is:
  - Hydrogen peroxide cleansing daily, with application of Bacitracin ointment for 3–5 days
  - Steri strips applied when it is clear that the wound is clean and without drainage and well vascularized. (This avoids the blistering effect that frequently occurs when steri strips are applied early after surgery.)
  - Steri strips are continued for 6 weeks changing them every 2–3 days.
  - After 6 weeks, Retin A (0.05%) is applied nightly for 3–6 months.
  - Vitamin E/Aloe Vera or silicon gel is applied during the day for 3–6 months.
  - Hytone 2% cream is used as needed for irritation.

Key technical points include:

- The final aesthetic contour of the abdomen should not be restricted by the length of the incision.
- Proper planning to ensure an ideal location of the abdominal incision is critical to the ideal concealment of the scar in a swimsuit. The incision should be low and transverse at the pubic hairline extending sharply upward at a 40–45° angle towards the anterior superior iliac spine.
- Dissecting the skin flap sharply or with electrocautery on pure cut mode to avoid thermal damage and therefore reduce serous drainage.
- Careful assessment of skin vascularity. Areas of poor or questionable vascular integrity should be excised. Determine the vascularity with a midline vertical incision up to the umbilicus following skin flap elevation prior to skin excision. The patient should be in a semi-flexed position during this maneuver (knees and hips at 45°). The skin excision is remarked after elevation to determine the precise amount of skin to be removed.
- It is aesthetically appealing to re-define the linea alba by placing 4–5 plication sutures in the midline subcutaneous tissue with 2–0 vycril stabilizing the tissue to the linea alba.
- Suture stabilization of the skin flap to the underlying fascia to eliminate potential space for seroma formation
- Further avoiding seroma formation by closing any potential space beneath the suture line by incorporating Scarpa's fascia and the underlying rectus and external oblique fascia into the suture line. This also stabilizes the position of the eventual scar at a predictable level planned pre-operatively.
- It is desirable by nearly all female patients to rejuvenate the mons pubis by lifting it to a natural, but not tense ,position via deep plication to the underlying fascia.
- A short, vertical inverted "T" incision is preferred rather than to raise the pubic hair line or closing skin under tension. Frequently the superior 2–4cm of hair bearing pubic skin is excised to avoid unacceptable hair line elevation.

CONCLUSION

With a careful selection of patients, and following the technical considerations described herein, these added procedures can be performed in a safe and reliable manner and can be undertaken by a competent, experienced plastic surgeon.