Safety of Face-lifts in the Older Patient

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Objective: To compare the surgical and anesthesia complications after rhytidectomy in patients 75 years and older vs those aged 45 to 61 years.

Design: Retrospective review of 107 patients of a single surgeon in private practice. All patients 75 and older who underwent rhytidectomy (using deep-plane and superficial musculoaponeurotic system plication techniques) from 1998 to 2002 were selected. This cohort was compared with a randomly selected group of rhytidectomy patients aged 45 to 61 from the same period. Complications related to the procedure or anesthesia were recorded, as well as American Society of Anesthesiologists (ASA) physical class, method of procedure, and patient age.

Results: The mean ages of the 2 groups were 79.0 years (33 patients) and 54.2 years (74 patients). Five patients in the older cohort had minor complications after surgery, compared with 7 in the younger group ($P = .52$). No major complications were reported.

Conclusions: Patients 75 and older carry risks of postoperative complications from face-lift procedures that are similar to those of middle-aged patients, when matched for ASA class. Preoperative counseling should emphasize patient health status rather than age when considering the risk of postoperative complications. Face-lift surgery can be safely performed in patients 75 years and older with ASA class less than 3.

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Today's older population is enjoying an unprecedented level of health. Reaping the benefits of modern medicine, senior citizens are now the fastest growing segment of the population. The 2000 data from the National Center for Health Statistics estimates that the average 65-year-old in America will live to be approximately 83. As a natural result of this longevity, people are enjoying active retirements, social lives, and, in some cases, professional pursuits. These endeavors are not free of cosmetic concerns. In 1998, seniors 65 and older had 90,911 cosmetic procedures, an increase of 113% from 1996 as reported by the American Society of Plastic Surgeons. According to an American Academy of Facial Plastic and Reconstructive Surgery poll of facial plastic surgeons in 2001, cosmetic procedures are on the rise in persons aged 70 to 79 and those older than 80. Since 1999, the number of cosmetic procedures for those aged 70 to 79 almost doubled, and the number has quadrupled in those older than 80.

Yesterday's dictum that "...elective operation for inguinal hernia in a patient older than 50 years is not justified" has become a distant chapter in the archives of medical history. At least one third of all surgical treatments in the United States are now performed in patients 65 and older.

Considering the advances in anesthesia care and monitoring, along with the volume of surgical procedures performed in older patients, one would posit that it is reasonably safe for this patient population to proceed with outpatient cosmetic procedures. The objective of this study was to lend credence to the practice of responsible outpatient cosmetic surgery in patients 75 and older by illustrating the safe experience and discussing the complications of a single surgeon (F.F.B.) with older patients undergoing a face-lift procedure (Figure 1 and Figure 2).

Methods

Patients 75 and older undergoing a face-lift procedure from 1998 to 2002 were included in the older cohort (33 patients). A comparison group of 74 face-lift patients aged 45 to 61 was randomly selected from the same period. One hundred seven medical charts were reviewed, all
at the same surgery center, with one of us (F.F.B.) as the surgeon. Superficial musculoaponeurotic system plication or deep-plane rhytidectomy was performed at the discretion of the surgeon. Concomitant procedures were performed in some patients, including forehead lift, blepharoplasty, and perioral and peri-orbital laser resurfacing.

Data were recorded with regard to American Society of Anesthesiologists (ASA) physical class (Table 1), surgical and anesthesia complications, method of procedure (deep-plane vs superficial musculoaponeurotic system plication techniques), and patient age. Statistical analysis was performed using chi-square tests to generate P values. Database entry was performed in FileMaker Pro (version 5; FileMaker, Inc, Santa Clara, Calif), and P values were calculated using Excel (Microsoft, Redmond, Wash). All patients were counseled to abstain from smoking for 2 to 4 weeks before surgery and for at least 1 month after surgery. Follow-up was maintained for all patients for at least 6 months after surgery.

**RESULTS**

The older cohort was composed of 33 patients aged 75 to 89 (mean age, 79.0). The ages of the 74 members of the younger group ranged from 45 to 61 (mean age, 54.2). Patients in the older cohort were all ASA class \(^2\), except for 1 who was class 3. The younger group was composed of 28 ASA class 1 and 46 ASA class 2 patients (Table 2). Five patients in the older cohort had complications after surgery, compared with 7 in the younger group (P = .52). Postoperative nausea or vomiting occurred in 3 patients, all of whom were in the younger group and were ASA class 2 (P = .21).

In the younger group, 1 of 28 ASA class 1 patients had a complication, compared with 6 of 46 ASA class 2 patients. In general, ASA class 1 patients had fewer complications compared with ASA class 2 patients, although this was not statistically significant (Table 3). No major complications were reported during a minimum follow-up of 6 months. Six deep-plane face-lifts were performed in each of the 2 groups. One deep-plane face-lift patient had some sloughing of skin from the flap, but had smoked during the immediate postoperative period. Table 4 lists individual complications.

**COMMENT**

Postoperative complication risks from face-lift procedures are similar in older and younger cohorts, when matched for ASA class. There was also no statistically significant difference in the number of surgical or anesthesia complications observed in patients with ASA class 1 vs class 2 designation. Preoperative counseling should emphasize patient health status rather than age when considering the risk of postoperative complications. In properly selected patients who are active and whose ASA class is less than 3, face-lifting can be just as safe in patients 75 and older as it is in middle-aged patients.
A review of the recent geriatric medical and surgical literature indicates that investigators support appropriate surgical interventions. Katlic\(^8\) describes the geriatric general anesthesia experience as safe, noting that centenarians are undergoing major elective procedures. However, age has been noted to be an independent predictor of longer length of hospital stay for elective procedures. Polanczyk et al\(^7\) performed a prospective cohort study evaluating 4315 patients 50 years and older undergoing elective noncardiac procedures with expected hospital stays of at least 2 days. After adjustment for sex, ethnicity, preoperative clinical characteristics, ASA class, and type of procedure, patients 60 and older were found to have a higher rate of perioperative complications, longer length of stay, and increased mortality. However, the overall occurrence of these complications was low. Mortality after surgery correlates more with ASA class than age.\(^10\) For the cosmetic surgery patient who is ASA class 2 or better, this appears to translate into a safe outpatient surgery experience.

There are few age comparison investigations within the facial plastic surgery literature. Shumrick et al\(^11\) investigated forehead flap nasal reconstruction in patients 80 years and older. Fifteen patients underwent paramedian forehead flap nasal reconstruction, with good cosmetic outcome and without complication. They concluded that the perceived risk of complications in older patients should not deter complex nasal reconstruction. Although the sample size was small, this study affirms the safety of these procedures when patients are properly worked up.

Weaknesses of the present study include the retrospective and nonrandomized method of data collection. Statistical analysis of this study was limited by small cohorts of unequal numbers. In addition, it would be preferable to have made this comparison using one face-lift technique; however, our data demonstrated no significant difference between the complication rates of the subgroups (with deep-plane vs superficial musculoaponeurotic system plication procedures). Although the long-term cosmetic outcome of these techniques is disputed,\(^12,13\) postoperative outcomes are not significantly different.\(^14\) Strengths of the investigation include standardization of technique, categorization into ASA class, and a minimum of 6 months’ follow-up for each patient.

In summary, we find the face-lift experience of patients 75 and older to be a reasonably safe one. As with any procedure, complications are a consideration and must be discussed with the patient in the preoperative setting. However, based on these data, it is more appropri-
ate to gauge the potential postoperative morbidities based on ASA class rather than chronological age.

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REFERENCES


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