## Safety of Cosmetic Procedures in Elderly and Octogenarians Patients

Maksym V. Yezhelyev MD., Varun Gupta MD., Julian Winocour MD., Bruce R. Shack, MD., James C. Grotting MD., K. Kye Higdon, MD

**Introduction:** The proportion of elderly patients (above age 65) is increasing in North America. This has resulted in an increasing number of elderly patient undergoing cosmetic procedures. The purpose of this study was to determine the incidence of postoperative complications in elderly patients (including the subgroup of octogenarians) compared with younger population.

**Methods:** All cosmetic procedures between May 2008 to May 2013 were retrospectively reviewed using the CosmetAssure database (183,914 cosmetic surgical procedures). Postoperative complications and comorbidities in elderly and younger patient groups were recorded and compared. Separate analysis of postoperative complications was performed in patients 80 years or older (octogenarians) and compared to the younger patient group.

**Results:** Overall 6,786 elderly patients who underwent cosmetic procedures were encountered. Mean ages in elderly and younger patients were 69.1±4.1 and 39.2±12.5 years, respectively. The elderly patients population contained more men (11.3% vs 6.2%, p<0.0001), higher mean BMI (25.4±4.6 vs 24.2±4.6, p<0.0001), higher incidence of DM (5.7% vs 1.6%, p<0.0001) and fewer smokers (3.4% vs 8.5%, p<0.0001) compared to the younger patients. Elderly patients had more facial procedures performed compared to younger patients (62.9% vs 12.0%, p<0.0001). Overall, the difference in postoperative complication rates were not statistically significant between young and elderly patients (1.94 % and 1.84%, p=0.538). When stratified by type of cosmetic procedure, only abdominoplasty was associated with higher postoperative complication rate in elderly compared to younger patients (5.4% vs 3.9%, p<0.0001). The most common postoperative complications in elderly patients were hematoma, infection and wound healing problems. The overall postoperative complication rate in octogenarians was 2.2% and not statistically different from the younger population (1.94%, p=0.972).

**Conclusion:** Cosmetic procedures in elderly including octogenarian patients remain safe with an acceptable complication rate compared to younger patients.

## **Disclosure/Financial Support**

Dr. James C. Grotting is a founder and shareholder of CosmetAssure<sup>TM</sup>. He is an author for Quality Medical Publishing and Elsevier. He is a shareholder of Keller Medical and Ideal Implant.

None of the other authors has a financial interest in any of the products, devices, or drugs mentioned in this manuscript.