

# **Incidence and Risk Factors for Hematoma after Reduction Mammoplasty at the Manhattan Eye, Ear and Throat Hospital**

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## **BACKGROUND:**

Reduction mammoplasty is one of the most common plastic surgery procedures with nearly 44,000 cases performed annually. The documented incidence of postoperative hematoma ranges between 1.5-8.0%. Previously studied variables included age, perioperative blood pressure, prophylactic anticoagulation, intra-operative blood loss and the weight of the resected breast tissue. The authors sought to expand upon existing literature and review additional risk factors associated with postoperative hematoma in patients undergoing reduction mammoplasty with the largest series to date.

## **METHODS:**

A retrospective chart review was performed of all consecutive patients who underwent reduction mammoplasty at Manhattan Eye, Ear & Throat Hospital during a five-year period (January 2014 to January 2019). Patient demographics, comorbidities, intraoperative details and postoperative complications were evaluated. The primary study outcome was return to the operating room for hematoma evacuation. Statistical analysis was performed using  $P \leq 0.05$  as defining statistical significance.

## **RESULTS:**

A total of 3118 breast reductions were performed in 1559 consecutive patients during the study period. The mean age of patients was  $37.4 \pm 13.3$  years with a mean BMI of  $30.0 \pm 5.5$ . In the majority of cases, Wise pattern, medial/superomedial pedicle breast reduction was performed (1190 patients, 76.3%). Concomitant liposuction was performed in 152 patients ( 9.8%). The mean weight of the resected breast tissue was  $645.5 \pm 380.7$  grams and the mean operative time was  $108.8 \pm 61.5$  minutes. The majority of breast reductions were performed without drain placement (1293 patients, 82.9%). The incidence of postoperative hematoma requiring operative evacuation was 1.2% (19 patients). The majority of hematomas (14 patients, 73.6%) were identified in the post-anesthesia care unit. The hematoma group and the control group were similar

in terms of demographics, comorbidities, BMI, and weight of the resected breast tissue ( $p > 0.05$ ). The mean pre-operative, intra-operative and post-operative blood pressure was also similar between the two groups. Shorter length of surgery (83.4 vs 109.1 minutes) and older patient age (41.2 vs 37.4 years of age) were found to be the only factors associated with increased incidence of postoperative hematoma.

### **CONCLUSIONS:**

Reduction mammoplasty remains one of the most commonly performed plastic surgery procedures with a documented incidence of postoperative hematoma ranging between 1.5-8.0%. Our study is the largest to date evaluating 3118 consecutive reduction mammoplasties and demonstrates that the incidence of hematoma requiring operative intervention was 1.2%. Shorter length of surgery and patient age were found to be the only factors associated with increased incidence of postoperative hematoma.