## Pre-operative Assessment and Reoperation Rates in Breast Augmentation - A Survey of ASPS Members.

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## Abstract

**Background:** Reoperation rates after breast augmentation are disappointingly high (1-3). There is no uniform method used by plastic surgeons to choose implants for breast augmentation. Anthropometric measurement based systems have shown to decrease reoperation rates (4,5). The purpose of our study was to determine the current surgical preferences and practices of plastic surgeons regarding preoperative assessment and their effect on clinical outcome in breast augmentation.

**Methods:** An 8-question online survey was sent to 4990 members of the ASPS. Data collected online was analyzed using Student's t-test or Pearson's chi-square test. A p-value of < 0.05 was considered statistically significant.

**Results:** The survey response rate was 12% (n=604). Breast Base Diameter (BBD) (n=286; 47.4%) was ranked the most important consideration vital in choosing implants. Most surgeons chose to reeducate their patients to resolve a conflict between their patient's implant size request and the surgeon's clinical judgement (n=385; 63.7%). Those surgeons who chose re-education ranked BBD as a vital consideration significantly higher than those who would accommodate their patients (2.03  $\pm$  1.41 vs 2.31  $\pm$  1.42; p = 0.041). Similarly, surgeons who re-educated their patients ranked IV (Implant Volume) as the vital consideration significantly lower than those who accommodated their patients (2.90  $\pm$  1.67 vs 2.44  $\pm$  1.47; p=0.002). The median overall self-reported reoperation rate for breast augmentation was 1% - 5% (n=299; 49.5%). Implant size change was the second most common reason for reoperations (mean rank 3.24  $\pm$  1.62), after capsular contracture (mean rank 3.30  $\pm$  1.65). Surgeons who reported a  $\leq$ 5% size change rate ranked IV significantly lower than those with reoperation rates >5% (2.93  $\pm$  1.71 vs 2.55  $\pm$  1.53; p=0.004).

**Conclusions:** Reported reoperation rates for size change were significantly lower in surgeons who regarded BBD as a more vital consideration than IV in choosing an implant for breast augmentation.

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