



## Abstract: Sexual Inequality for Women in Plastic Surgery: A Systematic Scoping Review

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**RESULTS:** No significant difference has been noted. For the intervention group, mean pain score for 3 days after discharge was 5.67 (SD 6.89), while the control group had a mean of 6.73 (SD 3.99) (p = 0.61). As for the number of pills, for the intervention group mean was 8.00 (SD 4.74), while the control group had a mean of 9.33 (SD 7.05) (p = 0.55).

**CONCLUSION:** There is no significance in pain score and number of narcotic pills when using the muscle relaxer cyclobenzaprine as an adjunct for pain control following alloplastic breast reconstruction.

Intraoperative Pectoral Blocks Reduce Perioperative Opioid Consumption in Reduction Mammoplasty Patients

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**INTRODUCTION**: In response to a growing opioid crisis, there is an increased focus on reducing opioid consumption perioperatively. Pectoral nerve blocks (Pecs blocks) have previously been shown to successfully manage postoperative pain in mastectomy patients, decreasing perioperative opioid consumption and postoperative nausea. Over the past several years, we have begun incorporating Pecs blocks into our routine breast surgeries including reduction mammoplasty. The purpose of this study is to examine the impact of Pecs blocks on opioid consumption and antiemetic requirement in reduction mammoplasty patients.

**METHODS**: We performed a retrospective review of all patients who underwent reduction mammoplasty between 2014–2016. All Pecs blocks were performed with ropivacaine under ultrasound guidance by the anesthesia team after induction of general anesthesia, but prior to the start of the operation. Demographics, operative details, opioid and antiemetic use, and complications were recorded. Opioid consumption was converted to a standardized oral morphine equivalence (OME)

value for comparison. Outcomes of patients who received Pecs blocks were compared against those who did not.

**RESULTS**: Seventy patients underwent reduction mammoplasty by four different attending plastic surgeons at our institution. Twenty-nine patients received Pecs blocks in addition to general anesthesia, while 41 patients received only general anesthesia without a Pecs block. These groups were similar with respect to age, BMI, average breast tissue resection, and follow up time. Performing the Pecs block added approximately 10 minutes of anesthesia time to the patients' case. Notably, intraoperative morphine consumption was significantly lower (85.03 vs 105.44, p = 0.01) in the Pecs block group. Additionally, OME for the first twelve hours following surgery remained slightly lower in the pectoral group (47.07 vs 49.72, p = 0.76), however did not reach significance. PACU antiemetic requirement also trended lower in the pectoral block group with 17.24% of block patients receiving antiemetics vs 24.39% of patients who did not receive a block (p = 0.47). This trend continued through the first twelve hours following surgery (34.48% vs 43.59%, p = 0.45). There were no complications related to the administration of the Pecs blocks.

**CONCLUSION**: Pectoral nerve blocks provide a safe and effective means of perioperative pain control in breast reduction mammoplasty patients. Administration did not substantially increase anesthesia time but did significantly reduce the need for intraoperative opioid analgesia.

## PRACTICE MANAGEMENT SESSION 1

Sexual Inequality for Women in Plastic Surgery: A Systematic Scoping Review

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Affiliation: Beth Israel Deaconess Medical Center | Harvard Medical School, Boston, MA **INTRODUCTION:** Previous research has highlighted the gender-based disparities that are present throughout the field of surgery. The aim of this study is to evaluate the breadth and variability of the issues facing women in plastic surgery, worldwide.

**METHODS**: A systematic scoping review was undertaken from October 2016 to January 2017, with no restrictions on date or language. We followed the five scoping review steps as proposed by Arskey and O'Malley: (1) Identification of the research question; (2) Identification of relevant studies; (3) Study selection; (4) Data charting and (5) Collation and reporting of results. A narrative synthesis of the literature according to themed issues was developed, together with a summary of relevant numeric data.

**RESULTS**: From the 2,247 articles found in the search, a total of 53 articles were included in the final analysis. The majority of articles were published from the US. Eight themes were identified, as follows: 1. Workforce figures; 2. Gender bias and discrimination; 3. Leadership and academia; 4. Mentorship and role models; 5. Pregnancy, parenting and childcare; 6. Relationships, work-life balance and professional satisfaction; 7. Patient/public preference; and 10. Retirement and financial planning.

**DISCUSSION AND CONCLUSION**: There were several key findings. First, despite improvement in numbers over time, women plastic surgeons continue to be underrepresented in the United States, Canada and Europe, with prevalence ranging from 14%-25.7%. <sup>3,4</sup> Academic plastic surgeons are less frequently female than male, and women academic plastic surgeons score less favorably when outcomes of academic success, such as h index and number of peer-reviewed publications are evaluated. <sup>5</sup> Finally, there has been a shift away from overt discrimination towards a more ingrained, implicit bias affecting individuals and institutions; most published cases of bias and discrimination are in association with pregnancy.

The first step toward addressing the issues facing women plastic surgeons is recognition and articulation of the issues. Further research may focus on analyzing geographic variation in the issues and developing appropriate interventions.

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Women Continue to be Underrepresented in Plastic Surgery: A Study of AMA and ACGME Data from 2000–2013

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**INTRODUCTION:** In the past decade, women have comprised nearly half of U.S. medical school graduates. However, women may remain underrepresented among surgical residents and surgeons due to factors such as the perceived surgical personality, culture, and lifestyle. We conducted the current study to assess recent trends of women trainees and physicians pursuing careers in plastic and reconstructive surgery to determine differences between this field and other surgical specialties.

METHODS: We reviewed data published by the American Medical Association and the Accreditation Council for Graduate Medical Education from 2000 to 2013. We abstracted the number of surgeons and surgical residents by sex, race/ethnicity, and specialty. We compared the ratio of female-to-male surgeons and residents as well as the racial and ethnic composition of female surgeons between specialties to evaluate for potential differences