

Fifteen-Year Decrease in General Surgery Resident Breast Operative Experience: Are We Training Proficient Breast Surgeons?

Kelsey E. Larson, MD, Stephen R. Grobmyer, MD, Mika A.B. Reschke, MD and Stephanie A. Valente, DO

Department of General Surgery, Cleveland Clinic, Cleveland, Ohio

OBJECTIVE: The goal of the study was to evaluate trends in general surgery resident breast cases over the past 15 years.

STUDY DESIGN: The Accreditation Council for Graduate Medical Education (ACGME) Case Logs Statistics Reports from 2000 to 2015 were reviewed for average breast-specific case numbers and trends over time. ACGME data were available for all cases and breast-specific cases including the following: excisional biopsy/lumpectomy, simple mastectomy, modified radical mastectomy, and sentinel lymph node excision.

SETTING: The study evaluation was conducted at Cleveland Clinic, Cleveland, Ohio.

PARTICIPANTS: No individuals directly participated in this project. However, all general surgery residents at ACGME-accredited programs are represented in this analysis by virtue of the ACGME Case Logs Statistics Reports.

RESULTS: Total residency case volume increased by 2% (2000-2015, $p = 0.0159$), with 2015 graduates logging 985.5 cases. In contrast, breast cases decreased by 17.1%. The largest drops were in modified radical mastectomy (61.5% decrease, $p = 0.0001$) and excisional biopsy/lumpectomy (25.8% decrease). Simple mastectomy increased from 6.0 to 10.8 cases ($p = 0.0001$). Sentinel lymph node excision fluctuated, but has been down-trending recently (67.3% decrease from 2010 to 2015, $p = 0.0001$). Decreased experience is occurring at both junior and senior resident levels.

CONCLUSIONS: Breast case operative experience for general surgery residents decreased by 17% between 2000 and 2015, despite increase in overall operative volume. Residents have less experience in more advanced cases including axillary management, raising concern about the proficiency of graduating surgeons with respect to these procedures. It is reasonable to set national minimums for resident breast operative experience to ensure that individuals are appropriately trained to perform these cases in practice. (J Surg Ed ■■■-■■■. © 2017 Association of Program Directors in Surgery. Published by Elsevier Inc. All rights reserved.)

KEY WORDS: breast surgery, operative Volume, resident education, ACGME

COMPETENCIES: Patient Care, Medical Knowledge, Practice-Based Learning and Improvement, Systems-Based Practice

INTRODUCTION

The current training in general surgery residency is changing for many reasons, including duty-hour restrictions, national regulations requiring increased attending supervision, and increasing complexity of technical skills and clinical disease management.¹ With changes in training, it is important to consider whether or not residents are getting appropriate experience to be able to provide the standard of care to patients when they begin independent practice. Given the incidence of breast cancer in the United States, a large number of breast operations are still performed by general surgeons²⁻⁴ despite the increasing frequency of breast surgery fellowship training.^{5,6} Thus, many current practicing surgeons rely on residency, not fellowship, for knowledge on caring for patients with breast cancer.

Prior studies assessing resident operative experience in the era of stricter duty hours have documented decreased case

Meeting Presentation: Abstract was presented at the American Society of Breast Surgeons Annual meeting in Las Vegas, NV, April 2017.

Correspondence: Inquiries to Stephanie A. Valente, DO, Department of General Surgery, Cleveland Clinic, 9500 Euclid Ave/A80, Cleveland, OH 44195; e-mail: valents3@ccf.org

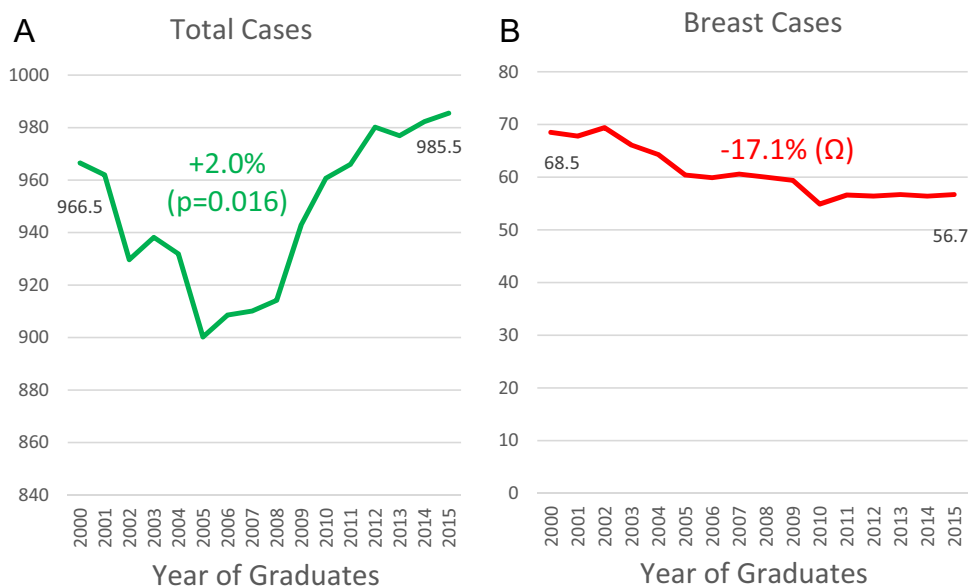


FIGURE 1. (A) Average total number of general surgery cases (y-axis) performed per resident over 5 years of training. (B) Average number of breast-specific cases performed (y-axis) per resident over 5 years of training. Percentage change is documented from 2000 to 2015 in both graphs. Ω = standard deviation not available so p-value could not be determined.

volume in thoracic, trauma, and vascular categories, but stable or improved experience in endocrine, intra-abdominal, and alimentary cases.⁷⁻¹⁰ Studies have noted stable or slightly increased numbers for the “Skin and Soft Tissue” category,⁹⁻¹¹ but breakdown on breast-specific operations from this category has not been specifically evaluated to the authors' knowledge.

The purpose of this study is to evaluate trends in general surgery resident operative experience for breast-specific operations over the past 15 years.

MATERIALS AND METHODS

The Accreditation Council for Graduate Medical Education (ACGME) case log system is the official method for recording operative experience during residency. General surgery residents are required to log all operative cases they participate in throughout their training. ACGME reports are used to determine board eligibility and are frequently referenced by hospitals to determine operative privileges, particularly as junior staff.

The ACGME Case Logs Statistics reports delineate the average number of cases performed per resident over 5 years of general surgery training. Exact operative experience by post-graduate year (PGY) is not available, although the reports do distinguish between “junior” (PGY 1-3) and “chief” (PGY5) level cases. PGY4 cases may be included in either category, depending on how the resident logged the case.

The average number of operative cases performed per resident over 5 years of training with standard deviation

(where available) was gathered for each year from 2000 to 2015 for the following breast-specific operations: excisional biopsy/lumpectomy, simple mastectomy (SM), modified radical mastectomy (MRM), radical mastectomy, and sentinel lymph node excision (SLN). Of note, the category label for excisional biopsy, lumpectomy, and partial mastectomy changed over the years in ACGME, and thus the data for these operations is included as 1 group in our analysis. Skin-sparing and nipple-sparing mastectomy is not tracked separately, so there was no way to identify resident experience with these cases versus SM. In addition, there is no specific category for “axillary dissection” in the ACGME Reports. Instead, “Major Lymphadenectomy” is the category for any area of the body (axilla, groin, abdomen, etc.). Thus, axillary dissection numbers specifically could not be analyzed. MRM and major lymphadenectomy cases were evaluated as a surrogate for axillary dissection.

Additional information that may theoretically contribute to variations in resident operative experience such as size of training program, type of program (academic versus community), location of the program, and demographics of the residents is not in the ACGME Case Logs Statistics reports. Request for this information was declined.

Unpaired *t*-test was used to determine statistical significance between time points with $p < 0.05$ considered statistically significant. In some instances, only the mean number of cases in a category was available (no standard deviation was available), and thus p-value could not be determined. These instances are indicated by this symbol (Ω) within the article.

Download English Version:

<https://daneshyari.com/en/article/8834721>

Download Persian Version:

<https://daneshyari.com/article/8834721>

[Daneshyari.com](https://daneshyari.com)