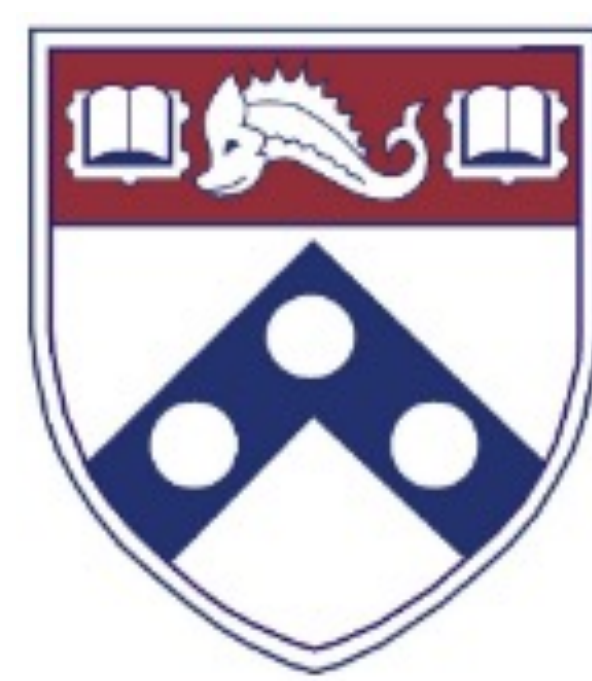
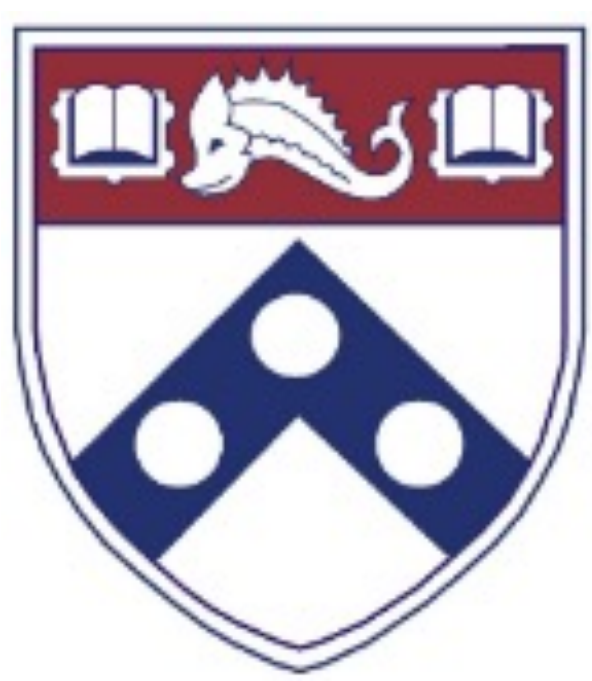




Exploring the Financial, Psychological, and Operative Factors Associated with Implant Removal Satisfaction in Patients with Breast Implant Illness

Corey M. Bascone, MD MBA¹; J. Reed McGraw, BS¹; Robyn B. Broach, PhD¹; Paris Butler, MD²; Stephen Kovach, MD¹

¹Division of Plastic Surgery, University of Pennsylvania, ²Division of Plastic and Reconstructive Surgery, Yale School of Medicine



Introduction

Breast implant illness (BII) is a poorly understood heterogeneous disorder that refers to patient-reported malaise, as well as a constellation of systemic symptoms that researchers, physicians, and patients have attributed to the placement of silicone breast implant (1). While some hypothesize that these symptoms are caused by an immune response towards silicone or one of the other chemical components of the implants, the pathophysiology of BII still remains unknown, and no diagnostic tests currently exist (2).

Current studies report an outstanding rate of resolution, or at least improvement in symptomology after implant removal surgery (3-5). The downfall of this research is that they have lacked a rigorous, validated, patient-reported outcome measure to properly assess symptoms and outcomes following treatment (5). The purpose of this study was to utilize the most comprehensive patient-reported outcome (PRO) survey possible, in order to better understand and characterize patient quality of life (QoL) after seeking implant removal. We believe the BREAST-Q Reconstruction survey and ASAPS BII questionnaire are currently the best available resources to collect PRO data, and in turn provide more evidence-based care, and inform prospective patients, as well as prospective surgeons about the potential benefits and risks of breast implant removal surgery in this patient population.

Objectives

- Our aim was to utilize a validated survey to evaluate and characterize patient experience, outcomes, and symptomology of patients who sought elective implant removal due to a diagnosis or high suspicion of BII.
- Secondly, we aimed to determine the impact of bilateral breast implant removal on patient-reported quality of life.

Methods

- A retrospective review of patients undergoing bilateral breast implant removal related to BII by two surgeons at an academic medical center between 2018 and 2022 was performed.
- An electronic survey was administered to all eligible patients containing the BREAST-Q reconstruction model, along with the American Society for Aesthetic Plastic Surgery (ASAPS) BII survey extension
- Outcomes were analyzed using a multivariable logistic regression adjusting for patient-associated factors.

Average Breast-Q Domain Scores

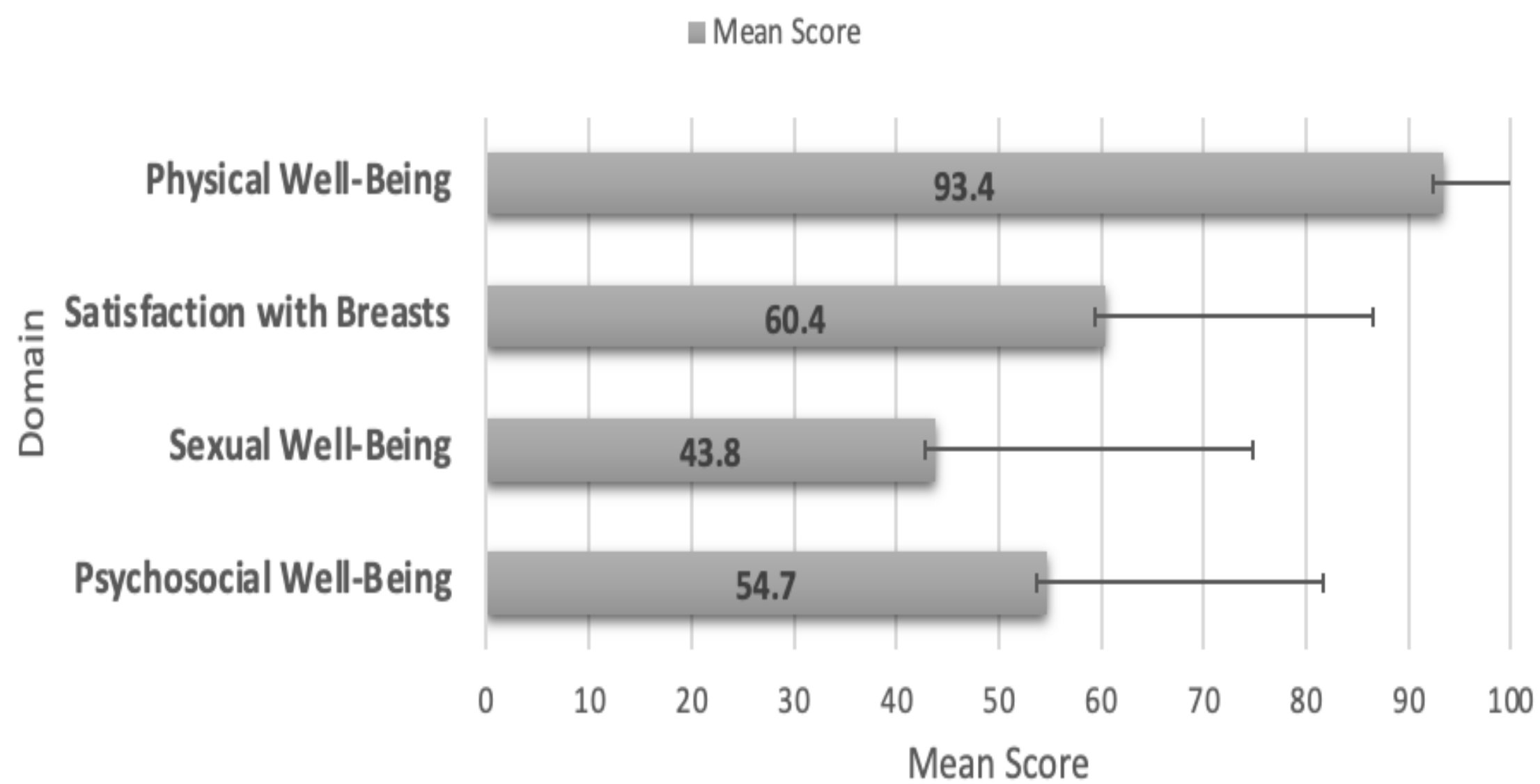


Figure 1: Average BREAST-Q Scores By Domain

Results

- 47 patients met inclusion criteria, and 25 responded to the survey for a **51% response rate**. 20 completed the survey in its entirety.
- **85%** of respondents were **Caucasian**
- **45%** had a documented history of **psychiatric illness**
- **30%** had a history of **capsular contracture**
- **20%** had documented **implant rupture**
- The majority of implant removals (**60%**) were **NOT covered by insurance**.
- **14 (70%)** had a **net improvement in their symptoms after removal**
 - Most commonly improved **chest discomfort, muscle pain, fever, and HA**
 - Least likely to improve **weight problems, joint pain, and insomnia**.
- **Capsular contracture** predictive of **reduced psychosocial, sexual, and breast satisfaction scores** (p=0.015)
- **Self-Pay** was predictive of **increased breast satisfaction scores** (p=0.009)
- **Reduced time to implant removal** was predictive of fewer residual symptoms (p=0.032)
- **Psychiatric illness had no significant impact on outcomes**

Conclusions

- In the setting of suspected or diagnosed BII, reduced time to implant removal may decrease the risk of residual symptoms and improve overall patient satisfaction
- The vast majority (70%) of those who underwent implant removal reported improvement in the symptoms documented at their initial pre-removal consult, regardless of implant type
- For patients with a history of capsular contracture, preoperative counseling should emphasize the fact that implant removal may improve physical symptoms only.

Reported BII Symptoms and Improvement Post-Removal

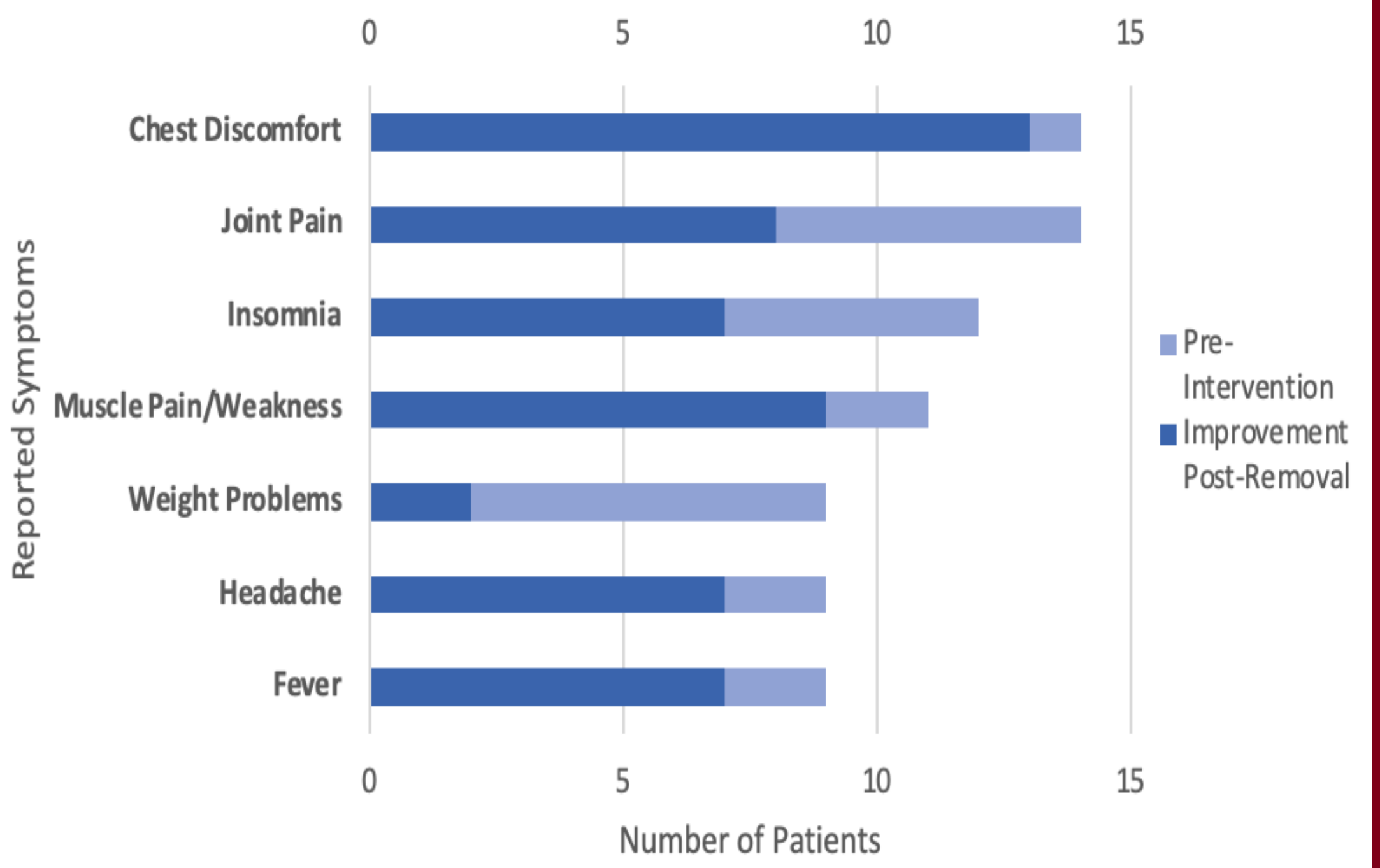


Figure 2: Symptom Improvement After Breast Implant Removal

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