



Social Factors and Outcomes Among Patients Undergoing Prophylactic Mastectomy



Nicolás Kass BA; Eva Roy BS; Elizabeth A. Moroni MD MHA; Angela T. Prescott MD; Carolyn De La Cruz MD
Department of Plastic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA.

Background

Results

Conclusion

- Patients with a genetic predisposition (most notably BRCA 1 and BRCA 2 mutations) incur an increased lifetime risk of developing breast cancer.
- Paucity of data evaluating the social factors that may influence high-risk patient decisions to undergo prophylactic mastectomy with reconstructive surgery.
- Goal is to use institutional data to improve patient counseling when discussing surgical options and anticipated outcomes with high-risk patients who have a genetic predisposition to the development of breast cancer.

- 100% of patients were female
- 98.8% were Caucasian/non-Hispanic
- Mean age: 42 years old
- Time from diagnosis to mastectomy: Mean of 799 days (2 years and 66 days)
- Average duration of follow up: 52 months

Breakdown of Genetic Predisposition

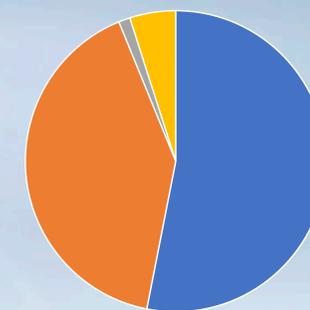


Figure 1: Breakdown of Genetic Predisposition

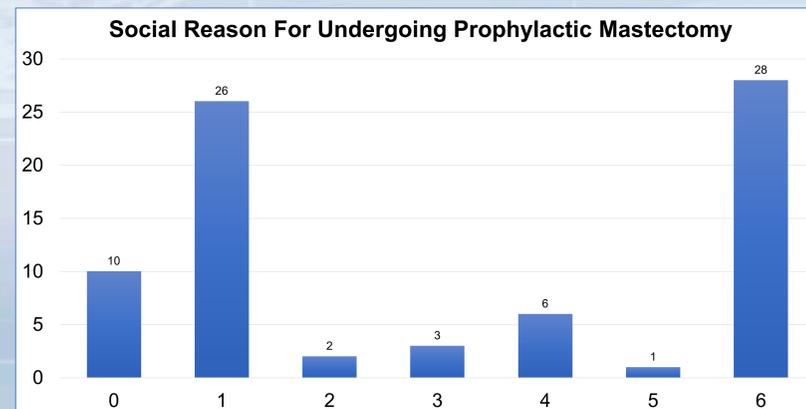


Figure 2: Breakdown of reason for undergoing prophylactic mastectomy

Figure 2 Legend

- 0 = not mentioned
- 1=immediate family member affected by invasive cancer
- 2 = immediate family member death
- 3 = pregnancy/ birth of child
- 4 = divorce/change in marital status
- 5 = other
- 6 = cancer diagnosis

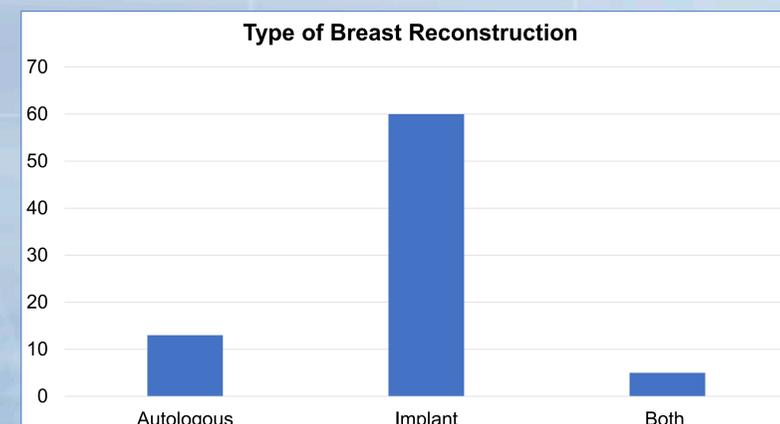


Figure 3: Type of breast reconstruction

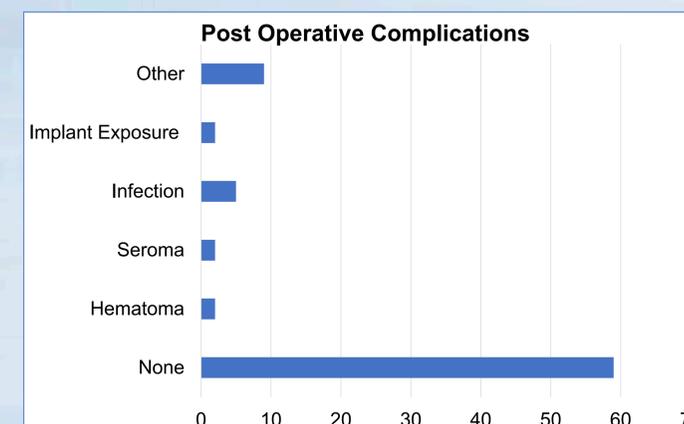


Figure 4: Postoperative complication breakdown

- Patients in our cohort sought out prophylactic mastectomy on average over 2 years after diagnosis of their high-risk genetic condition.
- The majority of patients underwent implant-based reconstruction and experienced a post operative course free from complication.
- Social factors that most influence a patient decision were noted to be an immediate family member affected by breast cancer or the personal development of breast cancer.

Future Directions

- Evaluating social determinants of health that may influence prophylactic mastectomy.
- Understanding the social factors that may influence a high-risk patient's decision to undergo surgery can allow us to improve patient counseling.
- Analyzing ZIP code to assess geographic disparity and inform outreach efforts.

Aim

- 1) To evaluate the surgical outcomes of patients with genetic predisposition to breast cancer who undergo prophylactic mastectomy and breast reconstruction.
- 2) To evaluate the social factors that may influence patients to undergo surgery.

Methods

- IRB approved
- Retrospective chart review
- Single surgeon experience from 2004-2021
- 83 patients included

Contact Information



Nicolás Kass
 Medical Student at University of Pittsburgh School of Medicine
 kass.nicolas@medstudent.pitt.edu