

Mental Health Outcomes Following Mastectomy with and without Breast Reconstruction: A Propensity-Matched Analysis

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Introduction

- Women undergoing mastectomy have reported high levels of satisfaction, which remain stable long-term, but they may suffer from issues with sexuality, femininity, and bodily image.^{1,2}
- Breast reconstruction may offer women a continued or renewed sense of femininity following breast disease.
- Quality of life is generally increased in women who undergo breast reconstruction following mastectomy.^{2,3}
- No study has yet analyzed timing and technique of reconstruction with mental health outcomes.

Clinical Questions:

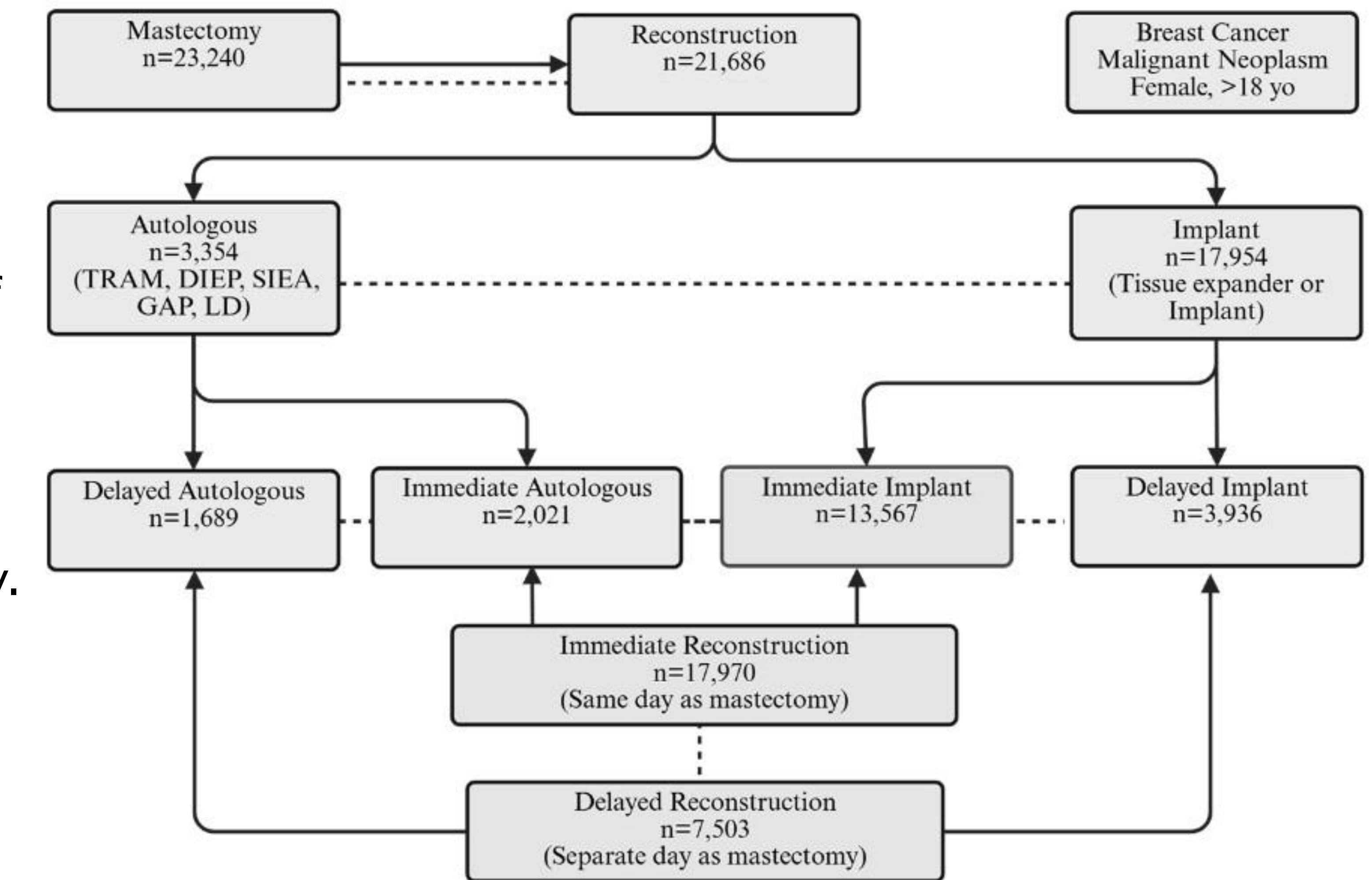
Does breast reconstruction decrease the occurrence of post-mastectomy mental health diagnoses and subsequent treatments? Does reconstruction timing and type affect mental health outcomes?

Methods

- Retrospective propensity-matched cohort study using TriNetX Research Network data including 51,422 patients
- Inclusion: ICD-10 code for malignant neoplasm of the breast, CPT code for mastectomy
- Exclusion: partial mastectomy, ongoing psychiatric diagnosis or treatment
- Cohorts: mastectomy only, immediate/delayed implant-based reconstruction, immediate/delayed autologous reconstruction
- Data points: new-onset or recurrence of psychiatric illness
- Statistics: chi-square or Fisher's exact tests for categorical variables, independent samples t-test for continuous variables

Results

- Mastectomy alone was associated with increased depression and antidepressant use compared to reconstruction cohorts ($p < 0.05$).
- Autologous reconstruction compared to implant-based reconstruction was associated with a decreased risk of depression after 1 year ($p < 0.05$).
- Subgroup analysis confirmed that immediate implant reconstruction was the highest risk cohort, with significantly elevated rates of depression, anxiety, mood disorder, antidepressant use, and psychotherapy.
- Covariates such as ethnicity, marital status, and preexisting mental health disorders were found to significantly increase the risk of depression following reconstruction.



Summary

- Breast reconstruction is associated with a lower incidence of postoperative mental health diagnoses and lower utilization of psychiatric medications compared to mastectomy alone.
- Risk of mental health disorders was significantly higher in patients undergoing immediate implant-based reconstruction within the reconstruction subgroup. In contrast, delayed autologous-based reconstruction was consistently associated with the lowest rates of mental health diagnoses and treatment.

Conclusions

- Delayed autologous breast reconstruction was associated with the lowest rates of mental health diagnoses and utilization of healthcare resources for mental health.

References

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Acknowledgments

- Funding is provided by the Department of Surgery at Louisiana State University Health Sciences Center.