RESULTS: 7,619 women completed all questionnaires (83%). 3,507 had a history of breast conservation surgery (43%), 1,269 had mastectomy (16.67%), 2,328 underwent breast reconstruction (BR) (30.6%), and 515 had a complex surgical history (6.8%). Linear regression demonstrated that compared to BCS, patients who had a complex surgical history reported the most PTSD symptoms. There was no difference in PTSD symptoms, or incidence, with other surgical procedures, including mastectomy alone and all the reconstruction subtypes. Factors associated with an increase in PTSD symptoms included stage III disease, chemotherapy, obesity, and minor. Logarithmic regression displayed an increased incidence of PTSD with minor complications and unemployment and a decreased incidence with increasing age at diagnosis and increased time since initial operation.

CONCLUSION: PTSD remains an underdiagnosed and undertreated comorbidity of breast cancer. This study demonstrates that a complex surgical history, chemotherapy, obesity, unemployment, and a history of higher stage disease may increase the risk for the development of PTSD or the experience of PTSD symptoms. Identifying patients at high risk and understanding the psychological ramifications of treatment options will allow earlier diagnosis and enhance patient counselling on their options.

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Does Early Urinary Catheter Removal Decrease Post-Op Urinary Tract Infections in Patients Undergoing Abdominal Free Flap Breast Reconstruction?

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PURPOSE: Hospitals are evaluated for quality based on a number of metrics including the occurrence of complications. Urinary tract infections (UTI) are among the most common healthcare-associated infections, with the majority seen after prolonged urinary catheterization. The Enhanced Recovery After Surgery (ERAS) protocol calls for early removal of urinary catheters. In this study, we compare the rate of UTI in patients who have undergone traditional recovery after surgery (pre-ERAS) to those who were enrolled in the ERAS protocol (post-ERAS). We hypothesized that early catheter removal would decrease the rate of UTI in patients undergoing breast reconstruction with free flaps.

METHODS: In this IRB approved study, medical records between March 2012 and June 2017 from a single institution were retrospectively evaluated to identify patients who underwent abdominal free flap breast reconstruction. This included patients seen before and after ERAS implementation, which occurred in May 2015. Early catheter removal was defined by our ERAS protocol as the morning of post-operative day 2. UTI was defined using the American College of Surgeons NSQIP definition. The incidence of UTI before and after ERAS initiation was compared using logistic regression while controlling for variables.

RESULTS: There were 265 total patients evaluated. 159 patients were classified as pre-ERAS implementation and 106 were classified as post-ERAS implementation. The overall incidence of UTI for all patients who underwent free flap reconstruction was 3.9%. When controlling for age, BMI, length of operation, flap laterality and need for urinary catheter reinsertion, the rate of post-operative UTI was significantly higher in the post-ERAS cohort compared to the pre-ERAS cohort (7.5% vs. 1.3% p=0.04, OR=0.173). Additionally, the rate of urinary catheter reinsertion was predictive of post-operative UTI (p=0.005, OR=0.056). Finally, post-ERAS patients required a higher rate of urinary catheter reinsertion for urinary retention compared to pre-ERAS patients (p=0.02, OR=0.105).

CONCLUSION: In contrast to our hypothesis, we found that the rate of UTI was significantly higher in the patients who underwent early catheter removal as part of the ERAS protocol. Further analysis is needed, however this finding may be related to higher rates of need for re-catheterization after early catheter removal. Based on these findings we are evaluating predictors of urinary retention in these patients to try to reduce the occurrence of UTI.

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The Impact of Post-Mastectomy Radiation Therapy on Permanent Implants in Direct-to-Implant Breast Reconstruction versus Tissue Expanders in Two-Stage Breast Reconstruction.