

## **A Cross-Sectional Evaluation of Body Image and Sexual Function Following Simple versus Radical Cystectomy in Women**

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**Introduction and Objective:** Body image and sexual function in women undergoing Radical Cystectomy (RC) and Simple Cystectomy (SC) is not well described. This prospective study compares overall quality of life, body image, sexual function, and satisfaction in women undergoing RC versus SC as compared to established population norms.

**Methods:** 53 patients who underwent RC or SC from 2005-2017 at a single hospital were contacted for participation in this survey. Demographic and procedural information was obtained from a retrospective chart review. Phone or electronic surveys were conducted using the following validated measures: *Patient Global Impression of Improvement* (PGII), *Body Image Scale* (BIS), and *Patient-Reported Outcomes Measurement Information System Sexual Function and Satisfaction Questionnaire* (PROMIS-SFQ) to evaluate overall quality of life, body image, and sexual function and satisfaction, respectively.

**Results:** The study response rate was 38/53 (72%). Of the 38 patients, 14 (37%) underwent RC and 24 (63%) SC. At the time of survey, mean age (RC 64±15 vs. SC 67±14 years,  $p>0.05$ ) and length of follow up (RC 41±24 vs. SC 48±36 months,  $p>0.05$ ) were similar. PGII scores were similar in both groups (RC 2.2±1.8 vs. SC 2.0±1.4,  $p>0.05$ ). Body image scores were also similar: 10.6±9.7 in the RC vs. 6.1±7.7 in the SC groups ( $p>0.05$ ), where a higher score corresponds to worse body image. Body image scores were inversely correlated with age: younger women had worse body image than older women in both groups ( $p<0.005$ ). Only 2 (14%) RC and 7 (29%) SC patients were sexually active ( $p>0.05$ ). Among all 38 patients, interest in sexual activity was significantly lower than the U.S. population (30.7 vs. 50, using PROMIS-SFQ T-scores<sup>1</sup>). When compared with SC patients, RC patients had significantly worse vulvar discomfort (RC 62.7 vs. SC 51.8,  $p=0.04$ ). RC patients had significantly higher rates of vulvar and clitoral discomfort and lower rates of ability to orgasm as compared to the U.S. population, whereas SC patients did not. Sexual activity was not associated with age at time of survey, marital status, PGII score, or body image.

**Conclusions:** Women undergoing both simple and radical cystectomy suffer from significant sexual dysfunction compared to the U.S. population. Sexual activity was not associated with age or body image.

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<sup>1</sup> Flynn, Kathryn E., et al. "Development of the NIH PROMIS® Sexual Function and Satisfaction measures in patients with cancer." *The journal of sexual medicine* 10 (2013): 43-52.