The impact of Body Mass Index on the Female Sexual Function Index and parameters of intimacy such as appearance satisfaction and the breast’s role in intimacy after breast cancer surgery (#237)
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Introduction

- Post-treatment body weight has been found to significantly affect survivors’ body image.
- Women with BMI>30 are potentially at greater risk for negative changes in self-image and sexual function after breast cancer surgery.
- We sought to explore the impact of BMI on sexual function, satisfaction with appearance, and preservation of the breast’s role in intimacy after breast cancer surgery.

Methods

- Single institution
- Secondary analysis of cross-sectional survey
  - With secondary retrospective chart review
- Inclusion criteria:
  - >21 years of age
  - Underwent primary breast cancer surgery at least one year prior to recruitment, between 2000-2013
  - Lumpectomy (L), mastectomy (M), mastectomy w/ recon (M+R)
- Survey tool:
  - Female Sexual Function Index*
  - Sexual dysfunction described as FSFI <26.55
  - 7 Investigator-generated questions
  - 7 Demographic questions
- BMI:
  - Normal weight (BMI<25)
  - Overweight (BMI 25-30)
  - Obese (BMI 30+)
- Statistics:
  - Chi-square, Fisher’s exact test used to compare categorical variables

Results

- Patient Demographics:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>BMI&lt;25 (%)</th>
<th>BMI 25-30 (%)</th>
<th>BMI 30+ (%)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>268</td>
<td>73 (28.8)</td>
<td>77 (30.2)</td>
<td>105 (41.2)</td>
<td></td>
</tr>
<tr>
<td>Age Median (Range)</td>
<td>57.0 (30.0-91.0)</td>
<td>54.0 (30.0-88.0)</td>
<td>56.0 (34.0-85.0)</td>
<td>61.0 (39.0-89.0)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Post-menopausal</td>
<td>(n=266)</td>
<td>(n=72)</td>
<td>48 (66.7)</td>
<td>56 (72.2)</td>
<td>91 (66.7)</td>
</tr>
<tr>
<td>CV Disease</td>
<td>(n=250)</td>
<td>(n=68)</td>
<td>(n=76)</td>
<td>(n=102)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>110 (44.0)</td>
<td>18 (26.5)</td>
<td>28 (36.8)</td>
<td>61 (19.4)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>No</td>
<td>150 (56.0)</td>
<td>54 (73.5)</td>
<td>28 (63.2)</td>
<td>94 (80.6)</td>
<td></td>
</tr>
</tbody>
</table>
*No difference between time from chemo, use of endocrine therapy, use of psych meds

- Survey Results:
  1) No significant difference in FSFI
  2) Dissatisfaction with postop appearance*
  3) Importance of role of the chest in intimacy

Conclusions

- A significant difference in sexual function measured by FSFI was not detected in this study.
- A significantly larger proportion of overweight women reported the chest played an important role in intimacy before and after surgery when compared to normal weight and obese women.
- Dissatisfaction with appearance increased with increasing BMI, therefore overweight and obese women appear to be more susceptible to breast surgery’s negative effects on body image.
- All three BMI groups experienced a decrease in the role of the chest after surgery.
- Surgeons should consider these outcomes when counseling women regarding the possible consequences of breast cancer surgery.

References