Shifting Paradigms in Breast Cancer Screening of Women Under Age 45
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METHODS

INTRODUCTION

In October, 2015, the American Cancer Society (ACS) updated its breast cancer screening guidelines, recommending that women at average risk for breast cancer begin annual mammography at age 45 and recommending against routine clinical breast exam (CBE) as a screening method. The 2003 ACS screening guidelines eliminated a recommendation for routine self-breast examination (SBE). Following current ACS guidelines, there are no routine breast cancer screening recommendations for women under age 45. We sought to investigate the method of detection of breast cancer in patients under age 45.

We performed a retrospective review of a prospectively maintained database at a single tertiary care institution from January, 2011 to December, 2014 to compare those diagnosed with breast cancer under age 45 to those diagnosed at ages 45 and older by method of detection (screening mammogram, routine CBE, or SBE), patient demographics, and tumor characteristics. Univariate and multivariable analyses were performed.

RESULTS N=870

<table>
<thead>
<tr>
<th>Method of Detection</th>
<th>N=105</th>
<th>N=765</th>
<th>p value</th>
<th>OR for &lt;45 vs ≥45 (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBE</td>
<td>5.3</td>
<td>2.2</td>
<td>&lt;0.0001</td>
<td>9.34 (2.73-31.8)</td>
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<tr>
<td>SBE</td>
<td>73.7</td>
<td>37.4</td>
<td>&lt;0.0001</td>
<td>5.03 (2.71-9.30)</td>
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<tr>
<td>Screening Mammogram</td>
<td>21.1</td>
<td>60.4</td>
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</tbody>
</table>

CONCLUSIONS

In our setting, patients younger than 45 are more likely to be Hispanic, have larger or HER-2+ tumors, and be diagnosed by routine CBE or SBE than older women. A significant proportion of women under 45 are diagnosed with breast cancer by screening mammography. Elimination of all modes of routine breast cancer screening in women under 45 may disproportionately affect Hispanic women. Further study at our institution is required to determine if a tailored breast cancer screening program has the potential to eliminate potential disparities in breast cancer outcomes.

REFERENCES