231 Preferences of women in deciding on treatment for low-grade ductal carcinoma in situ (DCIS)

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Background: Ductal Carcinoma In Situ (DCIS) is a true precursor of invasive breast carcinoma. If untreated, it is estimated that 10–15% of low-grade DCIS will develop into invasive breast carcinoma. Because there is little evidence about the prognosis of DCIS, in most cases women detected with DCIS will be treated as if it is invasive breast carcinoma; mastectomy or lumpectomy and radiotherapy. Knowing that a substantial number of DCIS lesions will never form a health hazard, most women with low grade DCIS might be over treated. Currently, an European randomized inferiority trial (LORD) is set up to test if screen-detected low-grade DCIS can be safely managed by an active surveillance (AS) strategy only. Because future patients will be confronted with this decision option, we studied the preferences of women about low grade DCIS treatment using a Discrete Choice Experiment (DCE).

Methods: In a convenient sample of the general population, women between 45 and 75 were asked to fill in a questionnaire that consisted of background questions, the Dutch Cancer Worry Scale (CWS) and the DCE questions. Treatment attributes included interval follow-up; risk of nerve pain; 10 year iBC free rate; level of disfigurement due to choice of intervention. A conditional logistic regression analysis was performed to calculate the coefficients of each attribute level. Subsequently, the relative importance of all attributes and predicted choice probabilities were calculated.

Results: From a total of 216 responders, the mean age was 52.6 (SD = 6.5) years. Ninety-two (43%) women scored high on the CWS (>13). The attribute “Level of disfigurement” had the largest impact (40%) on the predicted choice and stated preference. For women with a high CWS the impact of this attribute was higher than for women with a low CWS score (relative importance: 51% and 34%, respectively). Women with a high CWS score (>13) had a lower probability to opt for AS than for surgical treatment (47% vs. 53%, respectively), in contrast women with a low CWS score (≤13) had a higher probability to opt for AS than for surgical treatment (61% vs. 39%, respectively). Furthermore, women with a history with cancer had a higher probability to opt for surgical treatment than for AS (55% vs 45%, respectively). In contrast women without a history of cancer had a higher probability to opt for AS than for surgical treatment (62% vs 38%, respectively).

Conclusions: Based on the results, the level of disfigurement due to choice of intervention was the most important attribute for choice of low-grade DCIS treatment. Understanding the preferences of women in the general population may help to enhance and informed decision-making process and based on the needs of patients.

No conflict of interest.

232 Attitudes and beliefs of breast cancer patients toward their disease in urban South Africa: a cross-sectional descriptive study

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Background: Breast cancer is the most common cancer affecting women in South Africa. There is little knowledge of beliefs to help identify key areas to improve support and education in this demographically and culturally diverse population.

Material and Methods: Women with breast cancer accessing one government and one private breast clinic, with a variety of demographic and socioeconomic characteristics were asked to agree to statements of knowledge, attitudes and beliefs of breast cancer.

Results: Of the 259 participants, positive statements of medical cure (87.9%) and family support (90.5%) were most commonly believed. Beliefs in faith-based care and alternative treatments were also present (79.5% and 24.9% respectively). Negative beliefs were more likely in patients in the government hospital (RR: 3.73, 95% CI: 0.46–30.70) and in black patients (RR: 11.57, 95% CI: 1.37–97.89) as well as belief of cancer as a punishment (RR: 6.85, 95% CI: 1.41–33.21). However in multivariate analysis adjusting for age, education and access to information (by newspaper, internet, and confidence in reading and writing) there was no difference between racial groups or hospital used. Newspaper (aRR: 0.29, 95% CI: 0.05–1.54) and Internet use (aRR: 0.00, 95% CI: 0.00–0.00) were the most protective against the negative beliefs of cancer, belief of cancer was a punishment or curse (Internet use: aRR: 0.12, 95% CI: 0.02–0.99) and belief in alternative methods of cure (Newspaper use: aRR: 0.51, 95% CI: 0.27–0.96). Positive expressions of cure and being cancer were found equally in all women.

Conclusions: Attitudes and beliefs about cancer showed little independent demographic or socioeconomic variance. Negative beliefs were mitigated by access to information, and confidence in literacy. This study illustrates that information and education are important to promote positive attitudes in breast cancer treatment.

No conflict of interest.

233 Correlation of neutrophil-to-lymphocyte ratio (NLR) and platelet-to-lymphocyte ratio (PLR) to lymph node (SLN) involvement in breast cancer

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Background: There are a number of biochemical markers; including the neutrophil to lymphocyte ratio (NLR) and platelet to lymphocyte ratio (PLR), which are inexpensive markers of systemic inflammation. Since the presence of inflammatory cells, growth factors, activated stroma and DNA damage promoting agents in the inflammatory environment leads to cell proliferation and causes an increase in the neoplastic risk, these peripheral blood elements were suggested to be independent prognostic factors associated with poor survival with various cancers, including breast cancer.

Material and Methods: 170 consecutive nonmetastatic patients with breast cancer operated between January 2012 and January 2016 in our clinic were included in the present study. Patients with active infection, any known other cancer history, hematologic disorders, chronic or current steroid treatment, and chronic inflammatory or autoimmune disorders were excluded. A venous blood sample was obtained from each patient one week prior to surgery and collected in the EDTA (anticoagulant) tube. All patients underwent breast conserving surgery with SLN biopsy. Statistical analysis was performed with IBM SPSS software version 23 (IBM SPSS, Armonk, NY, USA). The differences between clinico-pathological characteristics grouped by NLR or PLR were compared using the Pearson χ² test or Fisher’s exact test for categorical variables and Student’s t test for continuous variables.

Results: All of the patients were women and mean age at diagnosis was 52.4±13.93. SLN positivity and NLR–PLR correlations are summarized in Table 1. PLR ratio was shown to be significantly increased in sentinel node positive patients.

Table 1. Serum NLR and PLR values correlated with SLN biopsy results

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SLN involvement</th>
<th>p value</th>
</tr>
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<tbody>
<tr>
<td>NLR</td>
<td>1.91±0.89</td>
<td>2.15±0.95</td>
</tr>
<tr>
<td>PLR</td>
<td>132.40±56.36</td>
<td>153.44±59.73</td>
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*Statistically significant.

Conclusions: Our findings support the hypothesis that high level of PLR can influence the lymph node metastasis in breast cancer. However, further studies are required to better understand the role of PLR value in predicting lymph node metastasis, in particular, during sentinel lymph node biopsy before a precise conclusion can be drawn.

No conflict of interest.

234 Distress among women taking part in surgical continuity of care for breast cancer: a mixed methods study

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Background: Women often experience distress in relation to the diagnosis, treatment and care for breast cancer, which can give rise to reduced quality