BACKGROUND

Breast Cancer is a hormonally driven tumor. Breast Cancer in young and especially in pregnancy exhibits distinct biological features and an aggressive phenotype. Despite several advances in the understanding and management of Breast Cancer, and improved treatment and survival outcomes, the need for dedicated clinical trials in Breast Cancer in pregnancy remains high.

Rationale

To compare maternal and infant outcomes with the published literature

Methods

Antepartum study

Statistical analysis

Inclusion Criteria

• Reproductive age group women

• Breast cancer in pregnancy and within one year post-partum period

Exclusion Criteria

• Non-Pregnant associated breast cancer

• Irreversible confounding risk of malignancy associated with pregnancy

STATISTICAL ANALYSIS

• STATA Version 25 was used for analysis of data

• Descriptive statistics related to demographic and clinical characteristics were calculated

• For each categorical characteristic, differences in proportion was tested using the Chi-square test of Fisher’s exact test

• We performed univariate analysis to see factor affecting outcome

• Multivariate Cox regression analysis was carried out with the factors found significant in univariate analysis to identify independent predictors

• All p values were two sided and with an alpha of 0.05

RESULTS

• Cohort Included 134 Patients

• 34 diagnosed during pregnancy

• 100 confirmed by histology

• Median Age: 31 (22-42) years

• 71% of the cohort had metastatic disease with median time to diagnosis from symptom detection was 6 months

• Family History: 23 patients had family history

• BRCA Mutation: 1 patient positive (BRCA2)

• Median week of pregnancy at diagnosis was 24 (23.1)

AIM OBJECTIVES

• To compare maternal and infant outcomes with the published literature

• To examine the epidemiological, diagnostic and prognostic factors with the published literature

SURVIVAL STATISTICS

Median Follow up = 22.5(10-54) Months

Table 1: Baseline Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Antepartum</th>
<th>Postpartum</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years (mean ± SD)</td>
<td>31.0 ± 7.0</td>
<td>33.0 ± 6.0</td>
<td>0.10</td>
</tr>
<tr>
<td>Stage (I/II/III/IV)</td>
<td>13/17/38/66</td>
<td>21/18/39/26</td>
<td>0.45</td>
</tr>
<tr>
<td>Histology (DCIS/Invasive)</td>
<td>13/121</td>
<td>16/115</td>
<td>0.02</td>
</tr>
<tr>
<td>TRAIL (months)</td>
<td>6.5 ± 4.0</td>
<td>9.0 ± 4.5</td>
<td>0.02</td>
</tr>
<tr>
<td>BRCA Mutation</td>
<td>1/133</td>
<td>0/132</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Table 2: Factors significant in univariate analysis for OS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds Ratio</th>
<th>95% CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years (mean ± SD)</td>
<td>1.05</td>
<td>1.00-1.09</td>
<td>0.05</td>
</tr>
<tr>
<td>Stage (I/II/III/IV)</td>
<td>3.08</td>
<td>1.90-5.03</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Histology (DCIS/Invasive)</td>
<td>2.42</td>
<td>1.31-4.49</td>
<td>0.01</td>
</tr>
<tr>
<td>TRAIL (months)</td>
<td>1.04</td>
<td>1.01-1.06</td>
<td>0.01</td>
</tr>
</tbody>
</table>

DISCUSSION

The findings of this study regarding OS of Luminal B subtype were similar to the data reported from other studies.

The study complements the current understanding of management of Breast Cancer in Pregnancy and presents a real-world practice setting.

CONCLUSIONS

The study confirms the importance of timely diagnosis and aggressive management of breast cancer in pregnancy.

The results of the study can be used to guide management of breast cancer in pregnancy.

LIMITATIONS

• The study was a single-center study and may not be generalizable to other settings.

• There may be selectivity bias in the selection of patients.

• The data was collected retrospectively.

REFERENCES


