The Relationship between Breast Cancer and the Development of Colorectal Adenomas
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**Background**

* Colorectal cancer (CRC) is the third leading cause of cancer mortality among women in the United States.
* Some studies suggest that previously diagnosed breast cancer is a factor that increases the risk for development of CRC.
* This increased risk may be secondary to chemotherapeutic agents, BRCA1 mutations, or the cessation of protective hormone replacement therapy.
* Other studies have not shown an increase in prevalence of adenomas or CRC in these patients and hypothesize that breast cancer patients are not considered high risk.
* Objective: To assess whether patients with breast cancer have a higher prevalence of adenomas than the general population

**Methods**

* A retrospective chart review of 800 women with a diagnosis of breast cancer was performed.
* Those who were 50 and older, and underwent a colonoscopy at our institution were selected.
* The patients’ race, colonoscopy findings and pathology of polyps were recorded. A control group of 146 women was created for comparison.

**Results**

* In total, 121 women with breast cancer underwent a colonoscopy.
* 76 were done for screening purposes, 16 for surveillance of previously found polyps, and 29 for gastrointestinal symptoms.
* 11 (9%) patients were African American, 106 (88%) were Caucasian, and 4 (3%) classified as other.
* The polyp detection rate (PDR) was 42.6%; the ADR was 24.7%, and the advanced ADR was 13.1%.
* Our control group consisted of 146 women without breast cancer who underwent colonoscopy.
* 18 (12%) patients were African American, 116 (79%) were Caucasian, and 12 (8%) were considered other.
* The PDR was 48.6%, ADR was 30.1%, and the advanced ADR was 5.4%

**Polyp Detection Rates**

<table>
<thead>
<tr>
<th>Study Group</th>
<th>Polyp Detection Rate</th>
<th>Adenoma Detection Rate</th>
<th>Advanced Adenoma Detection Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42.6%</td>
<td>24.7%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Control Group</td>
<td>48.6%</td>
<td>20.1%</td>
<td>5.4%</td>
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</table>

**Conclusion**

* Prior studies have shown an association between breast cancer and the development of CRC. However the degree of increased risk is uncertain.
* In our retrospective study, no difference was found in ADR between women with breast cancer and those in the control group.
* However, there was an increased advanced ADR in the breast cancer group.
* This finding is of unclear significance, and further studies with larger sample sizes are needed.

**References**