

## Study: A Systematic Review of Genetic Counseling Referrals in Women with Breast Cancer Under the Age of Fifty

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The National Comprehensive Cancer Network (NCCN) recommends that women diagnosed with breast cancer under the age of 50 be considered for genetic counseling. The Menorah Medical Center Cancer Committee had concerns that perhaps we were not appropriately referring our patients for this service. We do employ a full time team of genetic counsellors for our health system who are available to see patients by appointment at no charge to the patient.

We reviewed all patients diagnosed with breast cancer between January 1, 2014 and October 2, 2014. Twenty-six patients were identified that were age fifty or less at diagnosis, which represented 43% of our patients during that same time period. On review of their charts, all 26 received a recommendation to meet with a genetic counselor. Two of the 26 did not schedule or keep the recommended appointment. Of the remaining 24, 19 underwent genetic testing (79%). Three of 19 completing testing had a genetic mutation (16%).

In regards to the two who did not keep the appointment, given the proximity of the genetic counselors to the rest of their centralized cancer care, and the free service, as well as documented discussions of why genetic counseling should be considered, we have assumed that the patient did not want that service for personal reasons.

All 24 patients referred for genetic counseling met nationally recognized guidelines for this service. The likelihood of detecting a deleterious BRCA1 or BRCA2 mutation in women selected by age criteria alone is estimated to be 6-18% for women 30-40 years of age, and 6% for women ages 45-50 (1-5). The rate of positive mutations (16%) is in line with the reported national averages.

Our genetic counselors attend the weekly breast cancer tumor board with excellent attendance and sit on the Cancer Committee. They are readily available to our breast care team including surgeons, medical oncologists, radiation oncologists, and breast nurse navigators. While most of the referrals came from medical oncology, the entire team has been supportive and comprehensive in including genetic counseling in our comprehensive care. This data was reported to the Cancer Committee October 23, 2014.

Final recommendations are to continue to utilize our genetic counseling team fully. We are also excited to be launching a formal high risk screening program, BE Aware, to try to identify genetic mutation carriers based on family history and individualized risk assessment prior to a diagnosis of cancer.

#### References:

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Final Review by Cancer Committee 12/18/14