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Follow the Family Tree

BY MELISSA KNOPPER

Ovarian cancer survivor Karen Mason is the mother of boys. But there are times when she worries about her two teenage nieces. She even wonders about her future grandchildren. What if her ovarian cancer was genetic? Maybe they'll need to know if they are at higher risk because of heredity.

For that reason, Mason is considering a blood test that will show if she has either of the known genetic mutations that increase a person's odds of getting ovarian cancer. BRCA1 and BRCA2 are genes that normally suppress cell growth, but people who inherit an altered version of these genes are more likely to develop breast, ovarian, or prostate cancer. They also have a 50 percent chance of passing the mutation on to their children.

Overall, about 5 percent of women with ovarian cancer have a BRCA1 mutation, with BRCA2 carrying less risk than BRCA1. But the statistics are more dramatic for certain ethnic groups. Studies show 50 percent of all American Jewish women of Eastern European descent who have ovarian cancer carry the BRCA1 mutation.

"If a woman has a family history of ovarian cancer and/or premenopausal breast cancer, then she should get genetic counseling," says the American Cancer Society's Debbie Saslow, PhD. The guidelines for considering genetic counseling include one or more of the following: more than one cancer diagnosis, early-onset cancer (usually under age 50 for adult onset syndromes), a strong family history of cancer, or the presence of rare cancer, such as male breast cancer and fallopian tube cancer.

Insurance companies are increasingly willing to cover the cost of genetic testing, even for women with only one affected relative. The cost ranges from a few hundred dollars to \$3,000, depending on the length of the genes tested. For Ashkenazi Jews, testing is generally less involved and less expensive since mutations in three sites of these genes account for most of the BRCA-related cancers in their ethnic group.

Beth Karlan, MD, of Cedars-Sinai Medical Center, says women who have breast cancer should be followed for ovarian cancer since both cancers can share this genetic link. It can also help with peace of mind if someone is considering a double mastectomy and they want to be sure it's the right decision, Saslow says. Women at high risk for ovarian cancer also may opt to have their ovaries surgically removed.

Like CA-125 screening for ovarian cancer, however, the BRCA test isn't perfect. "There are a lot of times when a woman will get tested and it won't be a definite yes or a definite no," Saslow says.

To find a genetic counselor in your area, visit the National Cancer Institute's website at www.cancer.gov/search/genetics_services.