Doing battle with breast cancer

October 11 2013, by Robin Erb

Silvana Davis was 16 when breast cancer took her mother. Now a mother herself, the 41-year-old Brighton, Mich., woman is doing everything she can to make sure that she does not face the same diagnosis.

"For someone else, it's like saying 'You're at risk for heart disease, so take an aspirin.' For me it was 'You're at risk for breast cancer, so lose some weight,'" she said.

Although we can't change our genetics, mounting research underscores the importance of taking steps to beat back the odds of breast cancer, a disease that this year will be diagnosed about 232,340 times and will cause about 39,620 deaths, according to the American Cancer Society.

The research is clear: Cut back the alcohol. Approach hormone replacement therapy with caution. Shave off calories, too.

If the body is the interface between genetics and environment, food is a "buffer," said Dr. Sofia Merajver, director of the Breast and Ovarian Cancer Risk Evaluation Program at the University of Michigan's Comprehensive Cancer Center.

"It can protect us or hurt us, depending on what we eat," she said.

Her advice?

Limit alcohol to three to four drinks a week.

Eat at least five vegetables a day - both leafy and cruciferous like cauliflower, broccoli and cabbage. Go for lean protein and Vitamin D.

Exercise 30 minutes a day, six days a week. Go for core and upper-body strength training as well as aerobic exercise.

A growing body of research has strengthened the link between exercise and breast cancer risk, especially in postmenopausal women. One recent study of more than 95,000 women found that increases in physical activity after menopause lowered breast cancer risk by 10 percent, according to the American Cancer Society's Breast Cancer Facts & Figures report.

It's a lot of the same nutrition advice used to control other chronic diseases, making the lifestyle change "a win-win-win," Merajver said.

"What we know right now is that essentially the same behaviors that help us control our weight and decrease the risk of diabetes, decrease the risk of strokes, decrease the rate at which we develop cardiovascular disease and reduce the risk of developing cancer," she said.

Davis' mother was 35 when she was diagnosed with breast cancer. When Davis and her three sisters approached the same age, "we all just kind of freaked out," she said.

Davis, a physician's assistant at the University of Michigan, decided to undergo genetic testing to see whether she carried a mutation of the BRCA gene, the same one that Angelina Jolie carries and that prompted the actress to undergo a double mastectomy earlier this year.

The BRCA1 and BRCA2 genes help suppress tumors and stabilize a cell's genetic material. A mutation of those genes boosts the risk for cancer. About 12 percent of women in the general population will

develop breast cancer sometime during their lives; the risk jumps to 45 percent or more for those who inherit a BRCA mutation, according to the National Cancer Institute (NCI).

While waiting nearly two months for the results of the genetic tests, Davis began to make lifestyle changes.

She typically ate the right foods, she said, chuckling: "I'm Italian, it was about portion control." Davis stopped finishing the food on the plates of her two children, 8-year-old Nico and 10-year-old Elena. And while usually involved with their activities, she now threw herself into them even more.

As it turned out, Davis doesn't carry a BRCA mutation and her mother may not have either. But the news didn't send cancer out of her mind completely.

She shed 15 pounds from her 5-foot-4 frame, a loss that helped her feel like she has an edge on the disease that killed her mother: "I feel like I have a bit of control over this."

There's a growing awareness of trying to prevent cancer, not just treating it after diagnosis, Merajver said.

But patients are often confused.

They've heard advice from friends and others about preventing cancer - taking this pill or avoiding this particular food, for example. Sometimes, it's just "quackery, like snake oil," Merajver said.

Other times, it's from very preliminary research that only hints at a possible link, but that will take much more work to confirm.

"Just because there's a study, it doesn't mean there's validity to it," said Lisa Chism, a nurse practitioner and director of the Women's Wellness Clinic at Detroit's Barbara Ann Karmanos Cancer Institute.

The recent American Cancer Society report attempted to debunk persistent myths linking breast cancer to hair dyes, antiperspirants, abortion, and breast implants. They "are not associated with breast cancer risk."

To be clear, there are no guarantees against cancer. Our genetic coding is permanent.

Aging is nonnegotiable, too. Almost eight of every 10 new breast cancer cases and almost nine of every 10 breast cancer deaths are in women 50 years old and older.

But in July, a study published by NCI researchers clarified those risk factors that we can control.

Developed for researchers, NCI published new risk-prediction tools for breast cancer that included factors such as family history and when a woman started menstruating, as well as behaviors we can change - alcohol consumption, use of hormone replacement therapy and, to some extent, body mass index.

They correctly predicted the number of breast cancers - 2,930 breast cancer cases among 56,638 women, or just four off the number of cancer cases that actually occurred.

The researchers found no link between tobacco use and the development of breast cancer, adding to earlier studies that question a link between smoking and breast cancer.

Still, doctors say avoiding tobacco can have other health benefits, including the ability to better survive breast cancer if it develops.

Of the factors we can control to reduce the risk of breast cancer, using estrogen plus progestin hormone replacement therapy contributed the most to breast cancer risk, followed by alcohol consumption and body mass index.

Consider, for example, a 50-year-old postmenopausal woman without a family history of breast cancer. She has never used hormone replacement therapy, has a normal BMI, had her first child before age 25 and has never had any diagnosis with previous breast disease. And she doesn't drink regularly drink alcohol.

All are factors that mean she is low-risk: She has a 3.3 percent risk of developing breast cancer in 20 years.

Now add one or more alcoholic drinks per day to her life. That risk jumps to 4.1 percent.

At Karmanos, Chism and other nurse practitioners see women with breast cancer, those who have survived it, and those who are trying to prevent it.

Melissa Cheplicki of Southgate, Mich., was among those who came to Chism cancer-free but nonetheless concerned. Her mother was recovering from breast cancer; her sister had been diagnosed and was undergoing treatment.

Cheplicki, 41, a business analyst, was worried: "Not to be selfish and try to steal attention or anything, but realistically, the odds seemed to be stacked against me, and I wanted to do whatever I could to combat them."

The women tested negative for a BRCA mutation, but it's still unclear what genetic blip is yet undetected, putting Cheplicki at a heightened risk. Forced by the cancer diagnoses to dig into their family history, they realized that several women in their family had died of cancer.

Cheplicki now has routine mammograms and springs for the out-of-pocket costs - about $2,400 before she hits her deductible - for an MRI. She takes Tamoxifen, a drug that blocks the action of the female hormone estrogen and is used both to treat and prevent breast cancer.

Cheplicki is not simply waiting for a diagnosis: "I'd prefer to stay a high-risk patient and not become a cancer patient."

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HOW TO LEARN YOUR RISK ASSESSMENT

Even with surprisingly accurate risk assessment, it's unclear how women use the information when faced with their odds of breast cancer.

At least one in five women in an August study at the University of Michigan didn't believe the results of a risk assessment, believing instead that their low-risk outcome must have missed something important or that their high-risk outcome was overstated.

That doesn't surprise Dr. Ruth Pfeiffer, the lead author of a National Cancer Institute study in July geared for researchers: People want guarantees, not probabilities, she said.

"If there are 100 women and we can say five will get cancer, the question is will 'I be one of the 5?'" she said. "No statistical model can answer that."

For those who would like to know more, a tool for consumers gives women an idea of their chance of developing breast cancer.

It's somewhat less refined than the most recent research, but it can offer some insight to a woman's risk factors after answering questions about family history, race and the age at which she had her first child. It is at www.cancer.gov/bcrisktool.

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HELP FROM THE AFFORDABLE CARE ACT

Earlier diagnosis and more refined treatment are boosting survival rates among women with breast cancer. According to the American Cancer Society, death rates from breast cancer in the U.S. dropped 34 percent since 1990.

But ethnic and racial disparities persist. Among African-American women, death rates are 41 percent higher than white women.

Changes under the 2010 Affordable Care Act may help close those gaps. It already requires that Medicare policies provide free mammograms and is being extended. For some women, genetic testing for breast cancer risk also may be covered. For more information, visit www.healthcare.gov.