By Judy Peres

DCIS Test Helps Filter At-Risk Patients

A Harris Interactive survey of 1,226 women found that 70% of program participants felt more in control of their appearances after doing the program, compared with just 60% of those who didn’t do the program. Seventy-six percent of participants were more confident in how they looked, compared with 59% among nonparticipant patients.

Those are good results, Massie continued, given that people’s confidence tends to drop with a cancer diagnosis: The same survey showed the 77% of women felt confident in their appearances before treatment, compared with only 55% afterward.

“This is a disease that takes so many things away,” said Massie. “It’s nice to be able to give something back.”

Re-creating Normalcy

The program gave Nancy Lumb of Chevy Chase, Md., a sense of normalcy. “It’s pretty easy to put on a wig, but if you don’t have eyebrows, you’re not fooling anyone,” she said. “Learning how to re-create a natural eyebrow especially when you are going out... is being able to just be normal for a night.”

Lumb saw ads for the program in the room where she received her first chemotherapy treatment, shortly after her diagnosis. “I was 40, and the idea of looking different was terrifying,” she said. “I didn’t cry when they told me I had cancer, or when I told my husband and mother. But I cried when I lost my hair.”

Lumb said that keeping up her appearances has helped her heal faster. “There’s a lot of stuff happening around you, and being able to hold onto yourself allows for faster and better healing,” she said.

Lumb also wanted to keep her illness private, and the program helped her do that. “I work in a building with 1,500 people. I didn’t want to explain to 1,500 people what I was going through,” she explained. “Nobody knew when I transitioned to my wig, and no one knew I had fake eyebrows.”

Global Reach

The Look Good... Feel Better program started in 1989, with workshops at Georgetown University’s Lombardi Cancer Center and Howard University Cancer Center—both in Washington, D.C.—and at Memorial Sloan–Kettering. Since then, 16,000 workshops have taken place, with formal programs now in 2,800 medical centers across the U.S. It also conducts online workshops for women in remote areas, and the program has affiliates in 24 countries and has helped an estimated 1.2 million women, said Rouark.

Although most participants are women, workshops are also available specifically for men and teenagers. The program also targets patients at any stage of their disease.

“One of my patients was dying. She had an upcoming event for one of her kids, and she talked about how she wanted to look great,” said Massie.

For Quinn, making people look great—and feel better about themselves—is so fulfilling, he said. “I really believe that something a little bit magical takes place in the workshops.”

For more information on the Look Good... Feel Better program, and to find out about workshops in your area, visit http://lookgoodfeelbetter.org/.
“The DCIS Score was strongly predictive of local recurrence and invasive local recurrence, independent of clinical and pathological parameters,” said Lawrence Solin, M.D., chairman of the department of radiation oncology at Albert Einstein Medical Center in Philadelphia and principal investigator of the validation study. “It identifies an underlying biology not discoverable using our standard parameters.”

“This is a major scientific breakthrough,” said Solin. “We can now quantify the 10-year risk for an individual woman . . . [and] really use the power of molecular biology to tailor a treatment strategy.”

Ready for Prime Time?
Some scientists might argue that the test is not ready for prime time. Trial results have been known to change between their presentation at a meeting and their publication following peer review; indeed some abstracts are never published at all. But Solin disagrees. “Our DCIS Score is validated, objective, and available for clinical practice,” he said. “Any physician can use it,” assuming the patient meets certain eligibility criteria.

The validation study was conducted on archived tumor samples from patients who took part in E5194, an ECOG-led study of DCIS patients treated with surgery but no adjuvant radiotherapy. The patients all had low- to intermediate-grade DCIS lesions 2.5 cm or less, or high-grade DCIS lesions 1.0 cm or less, with clear surgical margins.

E5194 attempted to use clinical and pathological characteristics (patient age, tumor grade, lesion size) to identify patients at low-enough risk of recurrence to forgo radiation, and initial results were promising. But the 10-year follow-up was less clear cut. Enter the new gene test, which was able to provide additional, independent information.

The test uses a subset of 12 genes from the 21-gene Oncotype DX breast cancer assay and yields a “DCIS Score” of 0 to 100. The researchers found that DCIS patients with a score below 39 (75% of the 327 study subjects) had a 5.1% risk of developing invasive cancer in the same breast within 10 years (and a 12% risk of developing either invasive cancer or DCIS). That compared to 8.9% (24.5%) for patients with a score of 39–54 and 19.1% (27.3%) for those with a score of 55 or higher. Interestingly, the full-panel Oncotype DX test—which is widely used to determine risk of recurrence in patients with invasive breast cancer—was not useful in this DCIS population.

Laura Esserman, M.D., director of the UCSF breast care center, is among those who welcomed the DCIS Score as a much-needed opportunity to “do less.” She pointed out that a 10-year recurrence risk of 5.1% is no different from a Gail risk of 2.5%, which she called “mildly elevated risk. We don’t do mastectomy or radiation for those women.”

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Esserman believes many cases of DCIS can be treated with preventive strategies or surveillance. “DCIS is like atypia,” she said. “It marks us for prevention or risk reduction. I give people with low-grade DCIS the option of chemoprevention or monitoring.”

Athena Network to Test DCIS Risk
Esserman founded the Athena Breast Health Network, a collaboration between USCF and four other UC medical campuses. Over the next five years, project leaders plan to screen 150,000 California women for breast cancer, collect information on their health and other risk factors, and begin a decades-long tracking process that some have compared to the Framingham Heart Study. Among other things, the network will include a registry of DCIS patients, many of whom Esserman expects will opt for watchful waiting or chemoprevention rather than excision.

“A lot of people are anxious to avoid unnecessary treatment,” she said.

The Athena registry plans to profile everyone using the DCIS Score. There are also plans to conduct a test that’s being developed by UCSF researchers using standard immunohistochemical staining for factors including p16, COX-2 and Ki67 to predict progression to invasive cancer. The UCSF test, the work of Thea Tlsty, Ph.D., and Karla Kerlikowske, M.D., has been validated in a cohort of 1,162 DCIS patients treated by lumpectomy alone. With nine years of follow-up, Tlsty said, the UCSF high-risk signature predicted an impressive 63% of the patients who developed invasive breast cancer. On the other hand, the spectrum, women whose original DCIS showed a low-risk profile had less than a 3% chance of developing invasive cancer. However, those data have not yet been published.

Alvarado, one of the organizers of the Athena registry, said testing can sometimes be done on core biopsy samples, which could help a patient at low risk decide to forgo surgery.

Shelley Hwang, M.D., chief of breast surgery at Duke University, said she, too, sees DCIS patients who would rather watch it than treat it. One of Hwang’s areas of research is the intergroup Alliance trial in which DCIS patients are given preoperative hormone therapy. All the patients will get surgery at the end of the six-month trial, she said. But “the goal is to uncover clues as to which DCIS responds to hormonal treatment so we can be more selective about which patients to offer active surveillance, possibly with the addition of hormonal therapy.”

Hwang said that surveillance will likely include twice-yearly clinical breast exams and mammograms of the affected breast, “but MRI screening may also be an important...
adjunct to surveillance, and the Alliance trial will help us better understand this.”

“Screening unmasks a lot of things whose eventual clinical significance is hard to determine at the point of diagnosis,” Hwang said. “It’s like seeing a snapshot of a child and trying to determine what they’re going to be when they grow up. The earlier you catch them, the harder it is to predict. And because we can’t predict which ones are going to become bad actors, the default is to treat all cancers as if they would be the most aggressive if we left them alone. In the long run, this strategy doesn’t lead to better overall health except in a small population of individuals.”

SIDEBAR: Patient Advocates Drive DCIS Research in UK

In the UK, there is a growing movement of women who believe they were misled by the country’s mammography screening program and are not being given an opportunity to make informed choices.

“There are a lot of very angry women in this country,” said Prof. Michael Baum of University College London, one of the architects of the British breast screening program who has since become a vocal critic. The goal of the National Health Service screening program, he said, was to reduce the number of deaths caused by breast cancer. But about 25% of the cancers identified by screening are DCIS. Consequently, many women who would never otherwise have acquired a breast cancer diagnosis are being treated for breast cancer – yet there is no conclusive evidence that diagnosing and treating asymptomatic DCIS saves lives.

Baum said the vast majority of DCIS research thus far has been of little value because “people are asking the wrong question. We should be asking, ‘What is the natural history of DCIS?’ To address that question, we need to do a randomized, controlled trial of screen-detected DCIS, comparing conventional treatment – surgery and radiation – with active monitoring.”

That is precisely what is planned in the Low-risk DCIS Trial, whose chief investigator is Adele Francis, a surgeon at Queen Elizabeth Hospital in Birmingham. The trial will randomize 1,530 patients newly diagnosed with low- or intermediate-grade DCIS to active surveillance or standard care in an attempt to discover which patients can safely avoid treatment.

Claire Gaunt, senior clinical trial coordinator at the University of Birmingham, said the trial is expected to begin in mid-2013, pending funding approval.