

BEYOND THE MAMMOGRAM

NON-INVASIVE THERMOGRAPHY IS GROWING IN POPULARITY



ABOVE: A THERMOGRAPH; BELOW: SUSAN WILLSON IN HER STONE RIDGE OFFICE

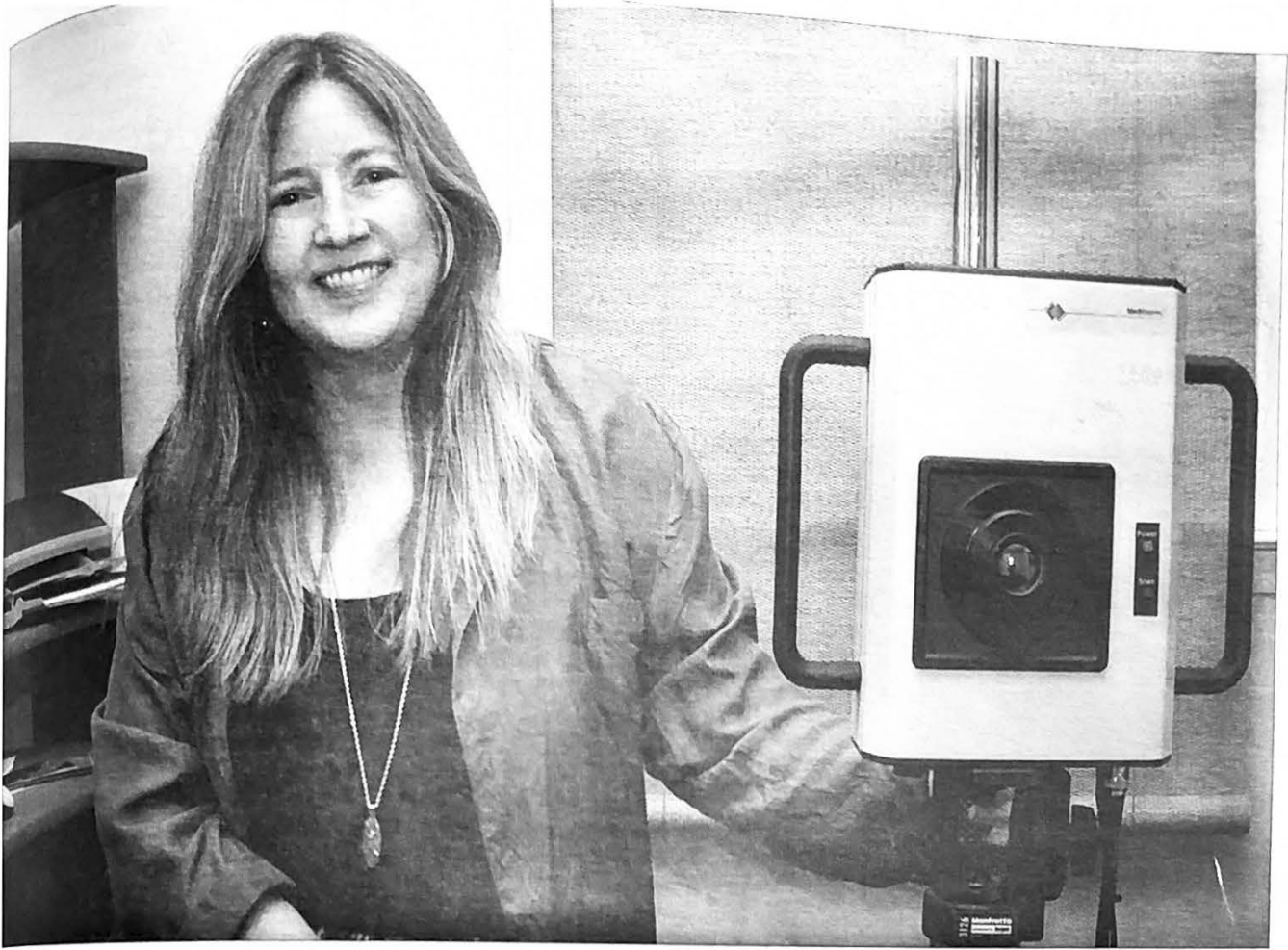
Breast cancer is the leading cause of death in American women over the age of 40, and over 182,000 women are diagnosed each year. Twenty-five percent of these women will die. Until the early 1980s, the only procedure available for detecting tumors, aside from self-examination, was the mammogram. Most women know of the discomforts and humiliation associated with this procedure—the breasts are squashed between cold glass plates—and they're often reluctant to have it done. There's an old joke circulating which is supposed to help women prepare for their first mammogram with easy, at-home exercises—one being to lie on a cold garage floor and wedge a breast under the rear tire of your car, having a friend back over it until it's sufficiently flattened and chilled. Those who've had a mammogram will agree that this is precisely what it feels like, but the actual procedure is really no joke at all.

In 1982, the FDA approved a new breast cancer detection procedure called thermography, which is non-invasive and considered mainstream in Europe and Canada. A local expert in thermography, Susan Willson, a certified nurse/midwife in Stone Ridge, is eager to spread the word about this technique, but she stresses that thermography is not necessarily better than mammography, as each has their place in the world of medicine.

"I feel it's important not to polarize the issue and make it an either/or thing," she says. "That's what causes so much resistance in the medical community, when you say 'Do this instead,' or 'This is better than that because.' People turn off in some ways, particularly when you're talking about breast cancer. It's the most litigated issue in women's health, and people are very sensitive about it. These are two different technologies, and each has their strengths and limitations."

In thermography, the patient is dressed in a paper gown so her body can start to acclimate to the temperature of the room, and she will fill out a questionnaire with certain risk factors. A special infrared camera will take a set of five different images that cover all areas of the breast; the body is not touched at any time. This camera is incredibly sensitive to changes in temperature differentiation and reads these patterns (any pathology would change the temperature of the skin). The images, along with the questionnaire, are sent to physicians who are specially trained to interpret thermographic scans. They will interpret the images, compare them to any previous ones, and send back a report. The patient is given two copies of the report with the images, so she can keep one and share one with a care provider if desired. It's recommended that the patient have two thermograms three

BY SHARON NICHOLS PHOTOS BY BETH BLIS



SUSAN WILLSON WITH THE MED 2000 IRIS DIGITAL INFRARED DIGITAL IMAGING CAMERA

months apart to establish a baseline, so the physician can make sure the first set of images shows a stable pattern for the individual. She should then have one thermogram every year.

Though not at all anti-mammogram, Willson has definite opinions on how we view medicine. "When dealing with health care, we want to be positive," she says. "Our mindset has a lot to do with how healthy we are and how we heal. There are a lot of appropriate reasons to have a mammogram, I just don't think screening is the best use of this procedure. The mammogram is limited to what can be squeezed between the plates, so there are some areas that are not going to show up as well. For instance, a mammogram would be very limited for a woman with implants, because mammography can't see well through them. Thermography is a test of physiology, not a test of anatomy the way a mammogram is, so it doesn't matter if there are implants there, the information is still available. A mammogram sees by looking at the density of tumor tissue, as opposed to the surrounding tissue. So, women with dense breasts—those with implants, fibercystic breasts, or young women—don't screen as well on mammography, tumors don't stand out."

Willson points out that health care providers receive mammogram reports all the time saying the study is limited due to the density of the patient's breast. She also says there are other limitations to

the mammogram. "A large percentage of tumors are located in the upper and outer quadrants of the breast. These are often missed by the mammogram, because it can only see what can be squeezed between the plates. The upper, outer quadrant of the breast up around the armpits can't be seen."

The medical establishment claims radiation exposure from mammography is slight and carries very little risk. But Willson says this isn't necessarily the case. "Mammograms use very low dose x-rays, but we're finding out that the low dose can carry five times the risk we originally thought it did. It's difficult for the body to repair the DNA damage that comes from these x-rays. And prior to menopause women's breast tissue is much more vulnerable to damage from x-ray, so we don't want to be screening really young women with mammograms."

One plus side of thermography is that it picks up on something many years before it would show up on a mammogram. "Tumors have usually been growing eight to ten years before they're big enough to show up on a mammogram," says Willson, "so you've lost all that time when you could be intervening. When you have abnormal cells that are wanting to grow into a tumor, they have to grow a blood supply to themselves in order to do that. Thermography would detect this abnormal blood supply and physiology earlier, so you have an opportunity to institute lifestyle changes, antioxidant therapies, or other protocols that have a good chance of

actually reversing these abnormal changes before a tumor is well established. We also now know that chronic inflammation is at the root of many diseases that kill us—cancer, diabetes, Alzheimer's—and thermography also picks that up. So, thermography offers the opportunity for prevention in terms of breast cancer. And even if a tumor is well enough established that you can't reverse the process, you can have it localized so you can use other diagnostic therapies, like the mammogram, ultrasound or MRI, to further localize it and have a biopsy earlier on when you have more options open to you. Mammograms aren't always accurate for screening; they work better as diagnostic tools."

The question of whether or not to have a mammogram is an individual decision, one that should be made with a care provider that is familiar with a patient's history in both technologies. But women have been looking for an alternative for a long time, and Willson treats patients from fairly far away—New York City, Albany, Vermont, Connecticut, Massachusetts, even Canada. Certified by the American College of Clinical Thermography at Duke University Medical Center, Willson has been offering thermography screening at her local practice for nearly two years. For more information on how thermography may be right for you, contact Willson by calling (845) 687-4807 or e-mail matrixconsulting@verizon.net. For general information on preventing breast cancer, visit www.preventbc.com. ●