

Thermography is diagnostic tool based on tissue temperature By Shannon Calder, Record Searchlight

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Michelle Hodge, 39, a chiropractor at Hudson and Hodge Chiropractic and Infrared Imaging in Redding, offers a somewhat new image testing for breast cancer called thermography. Q: What is thermography?

A: Basically, it's the use of infrared technology along with highly sophisticated computer processing to take images of the human body for means of evaluation.

Q: I know I mentioned earlier that it is somewhat new, but exactly how long has it been around?

A: The first use dates back to about 400 B.C. when Hippocrates covered patients with a muddy slurry and observed the resulting drying patterns. He felt that places of excessive heat or cold may give valuable information regarding the pathology of underlying organs.

Within the past 30 years, more than 800 studies have established thermography as a safe and effective means of evaluating the breast.

Q: How was thermography discovered to help detect breast cancer, and how exactly does it work?

A: In 1957 a tumor metabolism researcher, Dr. David Lawson, discovered that the temperature of malignant tissue was warmer than that of the surrounding healthy tissue.

As cancer cells multiply, the DNA of healthy cells is altered. This results in the production of chemicals that cause the opening of dormant blood vessels and the formation of new blood vessels in order to feed a developing tumor. This process causes changes in thermovascular patterns that are detected by the highly sensitive infrared camera.

Q: What are the benefits of having breast thermography?

A: The interpretation of thermography is not hindered by situations such as dense or fibrocystic breast tissue, large breasts or breast enhancements or reductions. These situations cause reading difficulties for mammography. Since there is no radiation, thermography is also safe for women who are pregnant.

This test can locate a cancerous or precancerous place up to 10 years before any other method. An early warning can offer women an opportunity to lower risk factors and make lifestyle changes to improve their health.

Q: Is thermography a replacement for mammography?

A: One cannot replace the other because they are two completely different kinds of tests.

Q: Who should have breast thermography?

A: Women over age 20 should be imaged every three years, and women over 30 once a year.

Q: Why isn't thermography more widely used?

A: Thermography was placed in a "further study needed" category after the Breast Cancer Detection Demonstration Project in the 1970s. This study contained major flaws. In the years following, cost-cuts in the insurance industry and health care politics slowed interest in the procedure.

But other more recent thermography studies have shown that the technique is a valuable detection tool.

Q: Where can one find more information on the subject, such as pricing, case studies, the large study mentioned earlier, etc?

A: On the Web site, [www.reddingthermography.com](http://www.reddingthermography.com). I have brochures in my office as well.

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