Statement on use of thermography to detect breast cancer

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Cancer Australia does not recommend the use of thermography for the early detection of breast cancer.

Breast thermography, also known as thermal breast imaging, is a technique that produces “heat pictures” of the breast. The rationale for thermography in breast imaging is that the skin overlying a malignant breast lesion can be warmer than that of surrounding areas.

Thermography in one form or another has been in use for approximately 35 years. The two most common approaches to thermography are contact thermography and telethermography (also called digital thermography).

Studies have shown that a tumour has to be large (several centimetres in diameter) before it can be detected by thermography (Homer 1985, Martin 1983). Screening mammograms have the ability to detect breast cancer at a much smaller size, and therefore to reduce deaths from breast cancer. Less than 50% of breast cancers detected by mammography screening have an abnormal thermogram (Martin 1983).

There is no current scientific evidence to support the use of thermography in the early detection of breast cancer and in the reduction of mortality. There is a need for high quality randomised controlled trials to be conducted comparing the use of thermography and mammography to detect breast cancer in an asymptomatic population (AHTA 2009).

This Position Statement is in agreement with BreastScreen Australia and the Royal Australian and New Zealand College of Radiologists statements on use of thermography to detect breast cancer.

References


More detailed background material for those requiring further information is available from the Cancer Screening Section, Department of Health and Ageing.

Resource status: