

Clinical-Medical Image

Thermography: An Innovative Approach to Early Detection and Monitoring of Health Conditions

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Case Study

A 50-year-old woman with a family history of breast cancer sought thermography as part of her routine health monitoring, aiming for a non-invasive screening method due to her concerns about potential risk factors. During the thermographic evaluation, an infrared camera was used to capture temperature variations in her breast tissue, which can indicate underlying issues. The results showed elevated temperatures in the left breast, raising concerns about possible pathological changes. Although these findings were not conclusive for cancer, they prompted her healthcare team to recommend further diagnostic investigations.

The patient underwent a comprehensive workup that included a mammogram and ultrasound. These additional imaging modalities confirmed the presence of a benign tumor, which was subsequently biopsied and determined to be non-cancerous. Following this diagnosis, her healthcare team discussed the significance of the thermographic findings within the broader context of her health. They highlighted that while thermography is not a standalone diagnostic tool, it can effectively complement traditional imaging, particularly for individuals at higher risk.

Motivated by her health journey, the patient made positive lifestyle changes, including improved dietary habits and increased physical activity. After six months, she returned for a follow-up thermography session, which revealed a reduction in the previously noted temperature anomalies, suggesting improvement in her condition. This case illustrates the innovative role of thermography in early detection and monitoring of health conditions. By offering a non-invasive way to assess physiological changes, thermography empowers patients to engage actively in their health management, especially those with heightened risk factors [1,2]. The collaboration between the patient and her healthcare providers emphasizes the value of integrating diverse diagnostic tools to enhance health outcomes and patient awareness.

Keywords: Thermography; Ultrasound; Mammogram

Acknowledgement

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Conflict of Interest

None.

References

- 1. Kim H, Lamichhane N, Kim C and Shrestha R. (2023). Innovations in building diagnostics and condition monitoring: A comprehensive review of infrared thermography applications. *BLDG* 13(11): 2829.
- 2. Khaksari K, Nguyen T, Hill B, Quang T and Perreault J, et al. Review of the efficacy of infrared thermography for screening infectious diseases with applications to COVID-19. *JMI* 8(S1): 010901-010901.

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