

- Title** Infrared Regulation Thermography for Cancer
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- Reference** Technology Review Report – 004/2014, online:
http://www.moh.gov.my/index.php/database_stores/store_view_page/30/247

Aim

To assess the safety, efficacy/effectiveness and cost-effectiveness on Infrared Regulation Thermography in detecting cancer in the MOH hospitals and healthcare facilities.

Conclusions and results

The search strategy yielded five full text articles that consist of three Systematic Reviews (SRs) and two diagnostic studies on the efficacy and effectiveness of infrared regulation thermography for screening and diagnosing of breast cancers. There were no retrievable studies on effectiveness of the other cancer and cost-effectiveness of the technology.

There was limited fair level of evidence to suggest that infrared regulation thermography was not effective as a screening tool for breast cancer. Fair level of evidence showed inconsistent results when infrared regulation thermography was used as a diagnostic tool for breast cancer. There was no retrievable evidence for the effectiveness of infrared regulation thermography for screening and diagnosis of other cancers.

In regards to safety, there was no retrievable evidence for the safety of infrared regulation thermography for screening and diagnosis breast and other cancers. USFDA did not approve the use of thermography for screening or used as diagnostic tool for breast cancer.

Recommendations (if any)

Based on the above review, Infrared Regulation Thermography is not recommended to be used either for screening or diagnostic tool for breast cancer in MOH facilities until more clinical trials is made available to determine its safety and effectiveness.

Methods

Literature search was done for published articles that assess the safety, efficacy or effectiveness and cost-effectiveness of Infrared Regulation Thermography. The following electronic databases were search: MEDLINE (1946 to 10 March 2014), EBM Reviews-Cochrane Database of Systematic Reviews (2005 to December 2013), EBM Reviews-Cochrane Central Register of Controlled Trials (January 2014), EBM Reviews-Database of Abstracts of Review of Effects (1st Quarter 2014), EBM Reviews-Health Technology Assessment (1st Quarter 2014) NHS economic evaluation database (1st Quarter 2014) via OVID, PubMed, INAHTA database, HTA database and USFDA database. The last search was run on 10 March 2014. No limits were applied to the search. Detailed search strategy is as in Appendix 1. Additional articles were identified from reviewing the references of retrieved articles and hand searching of journals. General search engine was used to get additional web based information.

Further research/reviews required

It is not recommended to be used either for screening or diagnostic tool for breast cancer in MOH facilities until more clinical trials is made available to determine its safety and effectiveness and more clinical research is warranted.

Written by

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