

Utilization of Clinical Thermology

Thermography, when used in a clinical setting, is an imaging procedure that detects, records, and produces an image (thermogram) of a patient's skin surface temperatures and/or thermal patterns. This procedure uses equipment that can provide both qualitative and quantitative representations of these temperature patterns. Thermography does not entail the use of ionizing radiation, venous access, or other invasive procedures; therefore, the examination poses no harm to the patient.

Utilization of surface temperature analysis in a clinical setting is appropriate and germane to the practice of healthcare whenever it is deemed necessary for examination and physiology. Just as it is well known that core temperature yields valuable information on the clinical status of the patient, surface temperature has been shown to produce invaluable information on the normal and abnormal functioning of the sensory and sympathetic nervous systems, vascular system, musculoskeletal system, and local inflammatory processes. The procedure also provides valuable physiologic information with regard to dermatologic, endocrine, and breast conditions.

The use of Thermography is well past the investigational or experimental stage and is approved for clinical use by the FDA. On review of the relevant research at the time, the Department of Health Education and Welfare (HEW) declared thermography non-investigational in 1972. Thomas Tierney, then director of the department of HEW, stated that "the medical consultants indicate that thermography in its present state of development is beyond the experimental state as a diagnostic procedure in the following four areas: (1) Pathology of the female breast, (2) Extracranial vessel disease, (3) Peripheral vascular disease, (4) Musculoskeletal injury".

In 1982, the FDA approved the use of thermography and stated that "...thermography can be a useful adjunct for diagnosis in many areas, including musculoskeletal injuries." This classification was published in the Federal Register: Vol 147, No. 20, pp 4419-4420, January 29, 1982

The specific thermographic system utilized is the Spectron IR Imaging System. The design of the system is specifically intended for human body surface temperature analysis. As such, the system is well suited to the needs of breast and full body thermal analysis.

Since patients presenting for breast and full body thermal imaging fall into one or more of the categories mentioned above, the use of thermography becomes appropriate and germane as an adjunctive imaging procedure.