

THERMOGRAPHY COMES TO MARQUETTE

Also Known as Digital Infrared Thermal Imaging (D.I.T.I.)

By Kathleen A. Ventre, Thermography Technician

Thermography or Digital Infrared Thermal Imaging (D.I.T.I.) is a non-invasive, diagnostic imaging procedure that uses a digital infrared camera and high-speed computer for imaging. The camera converts the infrared radiation emitted from the skin surface into electrical impulses that are visualized in color on a computer monitor. This visual image graphically maps the body temperature to a depth of 5.0 mm and is referred to as a thermogram. The spectrum of colors (white being the hottest and blue the coolest) indicates an increase or decrease in the amount of infrared radiation being emitted from the body surface. Therefore, clinical thermography is just a simple test of physiology that relies on the sympathetic nerve control of skin blood flow and the ability of the sympathetic system to respond and react to pathology anywhere in the body.

Medical DITI has been used extensively in human medicine in the U.S.A., Europe and Asia for the past 20 years. However, in the last twenty years, high levels of refinement in the cameras and electronic super cooling now enable the DITI scanners to record readings accurate to 100th of a degree. Unlike X-ray, C.T., Ultrasound, M.R.I., mammography etc., which are tests of anatomy, DITI is unique in its capability to show physiological change and metabolic processes. It is a very sensitive and reliable means of graphically mapping and displaying skin surface temperature. With DITI you can diagnosis, evaluate, monitor and document a large number of injuries and conditions, including back injuries, arthritis, headache, nerve damage, fibromyalgia, CRPS (Complex Regional Pain Syndrome), dental infection and TMJ, artery inflammation, vascular disease, carpal tunnel syndrome, disc disease, referred pain syndrome, sprain/strain, whiplash, soft tissue injuries, and sensory/autonomic nerve fiber dysfunction. It can also display the very subjective feeling of pain by objectively displaying the changes in skin surface temperature that accompany pain states.

One of the greatest benefits of DITI testing is in the monitoring of breast health. DITI can detect the subtle physiological changes that accompany breast pathology, whether related to cancer, fibrocystic disease, infection or vascular disease. All women can benefit from DITI breast screening, especially younger women (30-50) whose denser breast tissue makes it more difficult for mammography to be effective. The first breast screening provides the baseline of a client's "thermal signature" and all follow-up thermograms are kept on record for comparison. Because it takes years for a tumor to grow, the earliest possible indication of abnormality is needed to allow for the earliest possible treatment and intervention.

A medical doctor who has been fully trained to evaluate these images reads all thermograms. A detailed written report and copy of all thermographic images are given to the patient within three days of the procedure. If any suspicious areas are sited, a recommendation for follow-up with an ultrasound or mammogram will be made. Further information about D.I.T.I. and its scientific validity can be found on the www.meditherm.com website.

Currently Wellness Resources is the only facility offering this technology in the U.P. At this time, even though the procedure is **F.D.A. approved**, only a few insurance companies will reimburse for D.I.T.I. We are hopeful that this will change in the near future. For further information about D.I.T.I. you may call our office at 226-9301 or email us at www.wellnessresources1@sbcglobal.net.