THE VALUE OF EARLY INDICATIONS OF BREAST ABNORMALITIES WITH NON-INVASIVE SURFACE SCREENING OF THE BREAST WITH HIGH RESOLUTION MEDICAL INFRARED THERMOGRAPHY

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EARLY REDEFINED

We must reconsider the definition of "early" as it applies to breast abnormalities. Medical Infrared Thermography provides the practitioner the tool to detect surface vascular physiological abnormalities of the breast to reveal potential microscopic pathology deep in the tissue. On average, the first eight (8) years of a tumor's growth pattern remains in the microscopic stage, even at four years with 65,536 cells. The currently accepted definition of "early" detection by screening with mammography begins when it reaches the clinically detectable size of approximately 15mm, slightly more than 1/2 inch. A tumor of this size includes close to 1,000,000,000 (1 billion) cancer cells.

Why use Thermography for Breast Screening? Active Cancer Cells Can Double in Number Every 90 Days

90 days 2 cells 1 year 16 cells 2 years 256 cells 4.096 cells 3 years 4 years 65.536 cells 1,048,576 cells 5 years 16,777,216 cells 6 years 268,435,456 cells < 1 cm 7 years 4,294,967,296 cells > 2 cm (doubled 32 times) * 8 years

> *Normally detectable by traditional imaging at 1 billion cells 40 Doublings (Approx 10 Years) considered lethal.

Preventing breast cancer through early warning and preventative treatment protocols has the expectancy to reduce the incidence of late-stage recognition of breast disease. Comprehensive and readily available commercial thermography imaging facilities are the best delivery model to foster better patient healthcare through early detection of suspicious physiological activity.

BREAST CANCER IS A PROGRESSIVE DISEASE.

As breast cancer is a progressive disease, the point at which intervention takes place becomes critically important. To make a difference practitioners must start to place an emphasis on detecting the vascular signs of disease in its earliest formative stages, years before current clinical detection.

Proponents of mammography suggest a decrease in mortality rate due to clinical screenings, which is misleading. The best approach is the use of preventative protocols for early detection as a complement to mammography screening strategies. Only then can we reasonably expect mortality rates to decline significantly.

The prerequisite for effective pre-clinical surface screening is a specialized breast care center operated by licensed, highly trained and motivated professionals working as a team. The goal is to maximize the benefits of non-invasive thermographic screening while minimizing the risk and expense to the patient.

Highly developed thermal imaging technology with high degree of specificity is required to minimize the number of healthy individuals subjected to unnecessary invasive procedures. Differentiating benign from malignant is a highly difficult task - even for radiology. As a complimentary imaging tool, medical infrared provides new and vital information to assist the practitioner. The appropriate use of all available tools facilitates improved options and outcomes for the patient.

THERE ARE MANY SUBTYPES OF BREAST CANCER

The many subtypes of breast cancer have different physiological indications, growth patterns and growth rates. It's an oversimplification to expect that such a heterogeneous disease can be detected using only one modality; consequently comprehensive breast screening requires access to all modern imaging modalities with emphasis on prevention to give the patient responsible treatment options.

CONCLUSION. Experience has taught mankind that the only way to effectively control any disease is to prevent it in the first place. The possibility of controlling breast disease through clinical late-stage detection and treatment is not a reality as seen by the ever increasing number of cases. Alternatively, the woman and her health care provider need to recognize the importance of the vascular physiological changes observed by thermographic screening to reveal a pre-cancerous microscopic entity. In addition, medical professionals need to be educated and informed of the benefits of pre-clinical detection as the best means of prevention of diseases like breast cancer.

Finally, healthcare professionals need to acknowledge, first and foremost, that non-invasive physiological surface screening with thermography not only saves lives through prevention in the first place, but also the benefit of preventing unnecessary testing, treatment and mental distress.

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REFERENCES

- (1) Diakides Nicholas A and Bronzion Joseph D, Medical Infrared Imaging, Taylor & Francis Group LLC, Boca Raton, FL; 2007
- (2) Parisky YR, Sardi A et al., Efficacy of computerized infrared imaging analysis to evaluate mammographically suspicious lesions. Am. J. Radiol. 2003;180.263-272,
- (3) Head JF, Elliott RL, Infra Imaging: Making progress in fulfilling its medical promise. *Engineering in Medicine and Biology Magazine, IEEE*, Nov.-Dec.2002;Vol. 21; Issue 6;80-85
- (4) Olsen O and Gotzsche PC, Cochrane review on screening for breast cancer with mammography. Lancet 2001;9290,1340-1342
- (5) Keyserlingk JR, Ahlgren PD et al., Infrared imaging of the breast; initial reappraisal using high-resolution digital technology in 100 successive cases of stage 1 and 2 breast cancer. Breast J., 4,1988
- (6) Heyes GJ and Mill AJ, The Neoplastic Transformation Potential of Mammography X Rays and Atomic Bomb Radiation. *Radiation Research* 2004;162:120-127
- (7) Head, JF, Lipari CA, and Elliott RL, Comparison of mammography and breast infrared imaging: sensitivity, specificity, false negatives, false positives, positive predictive value and negative predictive value. IEEE, 1999
- (8) Head JF, Wang F, and Elliott RL, Breast thermography is a non invasive prognostic procedure that predicts tumor growth rate in breast cancer patients. Ann. N.Y. Acad. Sci., 1993;698:153
- (9) Dilhuydi, MH, et al, The importance of thermography in the prognostic evaluation of breast cancers. Acta Thermogarphica, 130-136
- (10) Despopoulos A and Silbernagl S, Color Atlas of Physiology, Thieme Publishers, New York, NY; 2003:214
- (11) Tabar L., Dean P, Breast Cancer: a progressive, heterogeneous disease requiring multidisciplinary diagnosis and treatment. The Journal of Oncology Management Nov/Dec 1994 Vol3 No6, pp 12-13