Abstracts

Microwave Radiometric Detection of Thermal Asymmetry of Varicocele

T.P. Felderman, J. Shaeffer, A.M. El-Mahdj, K.L. Carr and J.F. Stecker, Jr.. "Microwave Radiometric Detection of Thermal Asymmetry of Varicocele." 1985 MTT-S International Microwave Symposium Digest 85.1 (1985 [MWSYM]): 71-74.

Varicocele, a varicose enlargement of the veins in the spermatic cord, is found in 21-39% of men being evaluated for infertility. Thermometric detection of this condition was attempted by microwave radiometry as well as by contact thermometry using thermistor probes. The inguinal and scrotal regions of 44 male subjects and inguinal regions of 11 female subjects were studied. Substantially different thermal patterns were obtained by thermistors (surface temperature) and microwave radiometry (subsurface temperature). There was a correlation between left scrotal varicocele and a temperature elevation of the left spermatic cord using microwave radiometry. This thermal defect appeared to be corrected following surgery.

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