Abstracts

Hyperthermia

F.K. Storm. "Hyperthermia." 1981 MTT-S International Microwave Symposium Digest 81.1 (1981 [MWSYM]): 473-475.

The use of heat in cancer treatment dates back to the ancients with the application of red-hot irons by Ramajama (2000 B.C.), Hippocrates (400 B.C.) and Galen (200 A.O.). In more recent times, Westermark (1898) placed hot-water circulating cisterns into advanced carcinomas of the uterus and found palliative shedding of some tumors. Coley (1927) introduced "toxin" therapy for cancer, but stated that responses were associated with temperatures of 39-40° for several days duration, suggesting that the febrile reaction might have been the tumoricidal agent. Simultaneously Keating-Hart and Doyen (1910) introduced electrocoagulation of tumors, which is still in use today. Warren (1933) was one of the first to apply infrared and high-frequency current heating of tumors and found objective remissions of some cancers. With the subsequent development and popularity of x-irradiation therapy, hyperthermia research was all but abandoned until modern times when the selective thermosensitivity of tumor cells was more fully appreciated.

❑ Return to main document.