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BIOLOGICAL EFFECTS OF RADIO FREQUENCY WAVES

by

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ABSTRACT

The effect of repeated exposure of C3H mice to radio frequency (RF) energy (148 MHz) was investigated. The animals were exposed to 0.5 mW/cm^2 (63.25 V/m) in a TEM exposure chamber. They were exposed for one hour a day, five days a week, beginning on the 4th to 7th day postpartum, for 10 weeks. Both RF and sham irradiated animals were weighed daily from the beginning of irradiation treatments for ten weeks, and weekly thereafter. Blood was drawn from tail vessels of the mice for analysis at 28, 70, 100, 250, 300, 360 and 600 days of age. Necropsy and histopathological examinations were performed on randomly selected animals from each group. The results indicated that the formed elements in the blood were not affected by the exposure. The means of body mass of the irradiated and control animals were comparable. No significant differences in lesion onset, incidence, prevalence, extent, or type were observed when repeated RF-exposed animals were compared with sham-control groups. The study thus suggested that at the exposure levels studied, biological effects do not occur or are not detectable from the parameters used.

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