



**Effects of microwave exposure on rat peritoneal microphage function**

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In 2011, microwave/radiofrequency radiation (RF/MW) was classified as “possibly carcinogenic to humans” by the IARC. The incomplete knowledge of RF/MW-related cancer risks has initiated the search for biological indicators sensitive enough to measure the “weak biological influence” of RF/MWs.. It is known that the phagocytic mechanism of macrophages related with abnormal inflammation and cancer immunity will contribute to the explanation of several human diseases. To establish the potentially adverse effects of every day exposure to radiofrequency radiation (RF) on humans we performed a controlled animal study that aimed to investigate the influence of RF radiation on rat peritoneal macrophages. Adult male rats were divided into two groups, sham-exposed as control and exposed group with total body irradiation two hours daily during two weeks. A 915 MHz RF field, strength of 30 Vm-1. Mann-Whitney U-test showed no significant differences between the exposed and the sham-exposed group in any endpoint evaluated. Summarizing, we can conclude that exposure to 915 MHz electromagnetic radiation does not represent a significant risk factor for rat peritoneal macrophage activity and immunity.



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