

## عنوان مقاله:

Effects of Radio Waves on the Immune System of an Animal Model

## محل انتشار:

مجله تروما، دوره 28، شماره 4 (سال: 1402)

تعداد صفحات اصل مقاله: 6

## نویسندگان:

Hamed Akbari - *Department of Environmental Sciences and Forest, Faculty of Natural Resources and Environment, Science and Research Branch, Islamic Azad University, Tehran, Iran*

Lobat Taghavi - *Department of Environmental Sciences and Forest, Faculty of Natural Resources and Environment, Science and Research Branch, Islamic Azad University, Tehran, Iran*

Seyed Kamal Eshagh Hossaini - *Department of Pediatrics, School of Medicine, Hazrat -e Fateme Masoume Hospital, Qom University of Medical Sciences, Qom, Iran*

Mohammad Gholami Fesharaki - *Biostatistics Department, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran*

Seyed Alireza Hajiseyed Mirzahosseini - *Department of Environmental Engineering, Faculty of Natural Resources and Environment, Science and Research Branch, Islamic Azad University, Tehran, Iran*

## خلاصه مقاله:

Introduction: Radio waves, such as cordless phones and wireless modems, have increased significantly. This study aimed to measure the effects of the ۲.۴۵ GHz wave on a mice's immune system's blood markers. Method: Seventy-two male mice were used. Mice's were divided into one control group and two radiation-exposed groups (A and B). Then, there were two Wi-Fi modems, one plain and without an antenna, for group a mouse contact. The other was the type with two antennas; the mice in group B were brought into contact. After exposure, blood samples regarding white blood cells, monocytes, lymphocytes, and neutrophils were analyzed. Results: White blood cells, monocytes, lymphocytes, and neutrophils increased in the control group ( $P < 0.001$ ). However, these parameters significantly declined over time in the two intervention groups ( $P < 0.001$ ). The blood parameters of the mice in the two intervention groups exposed to various modems were similar ( $P > 0.05$ ). Conclusion: The results indicated the interference of waves of this spectrum, mainly radio frequency, with the immune system of exposed mice. Blood cells are more susceptible to long-term exposure to Wi-Fi waves and have a downward trend in terms of number. Also, no significant difference was observed between the blood parameters of the two groups with different modems.

## کلمات کلیدی:

Wi-Fi, immune system, electromagnetic waves

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1767748>



