

Paper No. ()

Title: Assessment of biological and biophysical hazard of moderate and severe usage of cell phone.

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WULFENIA, Vol 21, No. 2; Feb 2014.

ABSTRACT

Experiment was conducted to fifty five rabbits subdivided into four groups. Control group (G1), animals received no mobile electromagnetic radiation exposure. Second group (G2) whose exposed to weak mobile usage electromagnetic radiation as three times per day for total exposure 15 minutes of connection. Third group (G3) whose exposed to medium mobile usage electromagnetic radiation as three times per day for total exposure 60 minutes of connection. Fourth group (G3) whose exposed to severe mobile usage electromagnetic radiation as three times per day for total exposure 120 minutes of connection. Histopathological examination for body tissues, hemoglobin auto-oxidation, dynamic motion, hemoglobin derivatives concentrations, intrinsic viscosity, antioxidants level as well as apoptotic related proteins were measured. Results showed no dramatic histopathological changes found in all levels of the exposure while significant changes in hemoglobin parameters were detected.

Keywords : Cell phone– hemoglobin– derivatives – auto-oxidation – histopathological examination - apoptosis

