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Original Article

Mobile Phone Radiation Effects on Brain with Reference to the Protective Role of *Moringa oleifera*: Sonographic and Histological Study

Abstract

Background: Concerns regarding potential negative impacts on human health are growing as cell phone use dramatically expands worldwide. Due to the anatomical position of the brain, cell phones emit nonionizing radiofrequency waves that may have an impact on it. **Objectives:** The study aims to examine the effect of mobile phone radiation in male rats on the histological structure, and sonographic imaging of the brain of rats after mobile phone radiation exposure and investigate the ameliorating role of moringa.

Materials and Methods: In the study, 44 male Albino rats were used. The rats were randomly divided into six groups and exposed to cell phone radiation (in the data or calling modes) for 10 weeks. The 200 mg/kg of body weight of moringa extract was administered to evaluate the protective role of the rats for 10 weeks. **Results:** A sonographic and histological analysis of the rat brain showed that rats exposed to mobile phone radiation suffered serious damage to their neurons in several parts of the brain. Meanwhile, the rats given moringa extract suffered less harm. **Conclusion:** Rats given moringa extract had less damage to neuronal architecture in their brains.