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Former name: Cell Membranes and Free Radical Research



The central graphic features a 3D representation of a cell membrane with a TRP channel. A yellow circle labeled Ca^{2+} is shown entering the cell through the channel. The text "6th World Congress of Oxidative Stress, Calcium Signaling and TRP Channels" is prominently displayed in red and black. A small globe is integrated into the number "6".

6th World Congress of Oxidative Stress, Calcium Signaling and TRP Channels

TRP Channel

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► Poster No. 91

The effect of electromagnetic field on oxidative stress parameters in rat brain tissue

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Extremely low frequency electromagnetic fields represent one of the environment factor that influence animal organism that that conduct the organism to stress. In this study we determined the oxidative stress parameters from rat brain tissues that were exposed to the Global System for Mobile Communication (GSM) cell phone rated at a frequency of 1800MHz. We divided female mature albino rats of Wistar strain in three groups two of which were sham and control. Third group was exposed to the RF-EMF for 2 h/day for 8 weeks. At the end of the study, the rats in all groups were sacrificed by cardiac puncture under ketamine and xylazine anesthesia. Brain tissues were separated and kept at -80 °C until superoxide dismutase (SOD) and catalase (CAT) activities and glutathione (GSH) malondialdehyde (MDA) levels were measured. Tissue protein contents were measured according to the method developed by Lowry et al. using bovine serum albumin as a standard. The electromagnetic field led to a significant increase in malondialdehyde (MDA) levels and significant decrease in SOD and CAT levels in the brain tissue of rats (p<0.05). There was no significant

Keywords: Electromagnetic field, oxidative stress, antioxidant, brain

References

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► Poster No. 92

Relationship between pregnancy rate and serum sialic acid levels and paraoxonase activity after synchronization with progesterone releasing intravaginal device protocol in heifers

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In this study, it was aimed to determine the relationship between pregnancy rate and serum sialic acid levels and paraoxonase activity after progesterone releasing intravaginal device application in heifers.

In the current study, 160 heifers were synchronized with 5-day Co-Synch + Progesterone Releasing Intravaginal Device (1.55 g progesterone, PRID, PRID Delta[®], Ceva,