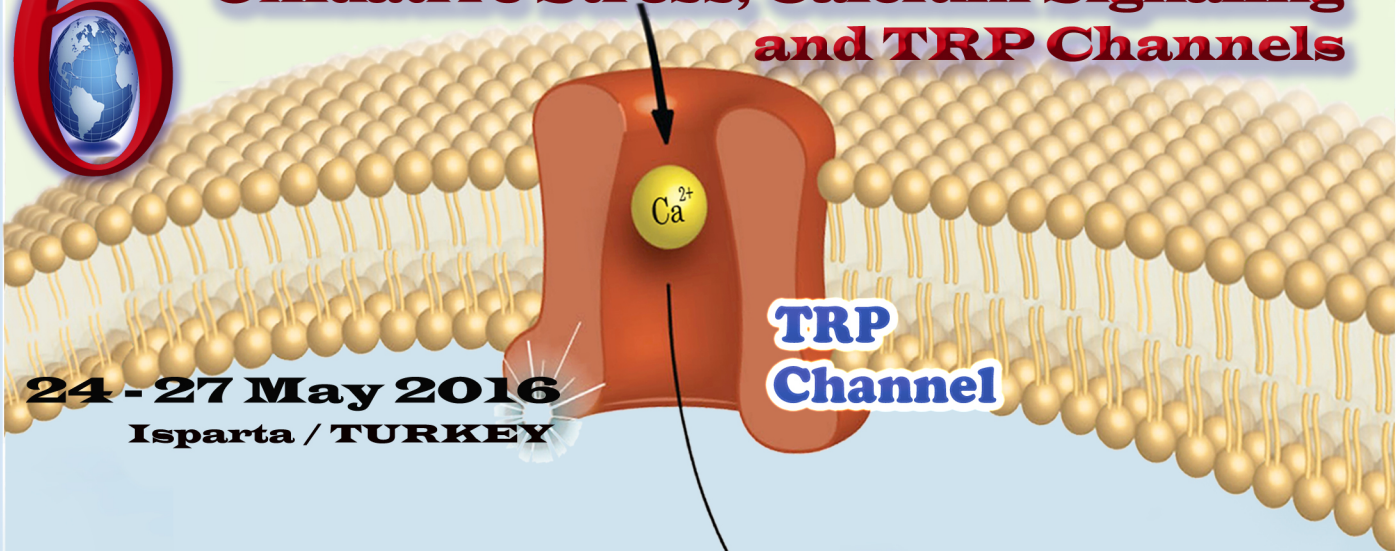


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6th World Congress of Oxidative Stress, Calcium Signaling and TRP Channels

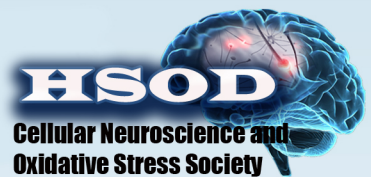


24 - 27 May 2016
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**TRP
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AIM AND SCOPES

Journal of Cellular Neuroscience and Oxidative Stress is an online journal that publishes original research articles, reviews and short reviews on the molecular basis of biophysical, physiological and pharmacological processes that regulate cellular function, and the control or alteration of these processes by the action of receptors, neurotransmitters, second messengers, cation, anions, drugs or disease.

Areas of particular interest are four topics. They are;

A- Ion Channels (Na⁺- K⁺ Channels, Cl⁻ channels, Ca²⁺ channels, ADP-Ribose and metabolism of NAD⁺, Patch- Clamp applications)

B- Oxidative Stress (Antioxidant vitamins, antioxidant enzymes, metabolism of nitric oxide, oxidative stress, biophysics, biochemistry and physiology of free oxygen radicals)

C- Interaction Between Oxidative Stress and Ion Channels in Neuroscience

(Effects of the oxidative stress on the activation of the voltage sensitive cation channels, effect of ADP-Ribose and NAD⁺ on activation of the cation channels which are sensitive to voltage, effect of the oxidative stress on activation of the TRP channels, role of TRPM2 channels in neurodegenerative diseases such Parkinson's and Alzheimer's diseases)

D- Gene and Oxidative Stress

(Gene abnormalities. Interaction between gene and free radicals. Gene anomalies and iron. Role of radiation and cancer on gene polymorphism)

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Biophysics	Biochemistry
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Oncology	Psychiatry
Neuroscience	Neuropharmacology

Keywords

Ion channels, cell biochemistry, biophysics, calcium signaling, cellular function, cellular physiology, metabolism, apoptosis, lipid peroxidation, nitric oxide synthase, ageing, antioxidants, neuropathy, traumatic brain injury, spinal cord injury, Alzheimer's Disease, Parkinson's Disease.



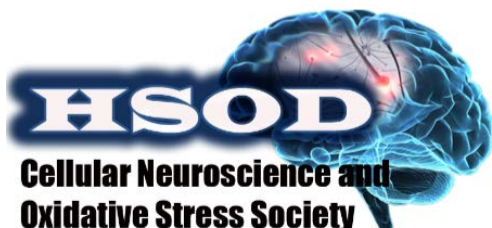
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The abstract of the congress is published in this issue.

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immunostaining had a negative result in the control group. A big number of necrotic cells were observed in CS+ALA group. TNF- α immunopositive cells in CS group were found at medium level (+2), in CS+ALA group-at extensive level (+3).

In conclusion, it was observed that cigarette smoking caused sporadic structural changes in liver tissues. The administered of ALA (100mg/kg) has no protective effect against cigarette toxication on liver tissue. Future studies which will applied different doses of ALA can bring clarity to this issue.

Key words: Cigarette smoking, liver, alpha lipoic acid

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► Poster No. 106

Effects of treadmill and swimming exercises on oxidative stress parameters in cerebellum of rats

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There are many benefits of regular physical activity on health. However, the different types of exercise increases free radical production in a few ways. In addition to the control of muscle activating muscle contractions stimulate the cerebral cortex and cerebellum area as well as play an important role in the basal ganglia. The purpose of this study was to find out the effects of both treadmill and swimming exercises on oxidative parameters of cerebellum of rats.

Fifty six male rats were divided into two groups and one of the groups was applied 15, 30 and 60 minutes daily swimming exercises for 7 days during 12 weeks, and the

second group was applied treadmill exercises for 5 days during the same period of 12 weeks. At the end of the application, the cerebellar tissue of the rats was removed. Tissues were stored in at -70°C until analysis and homogenized on the day analysis. In the cerebellar tissue samples were measured malondialdehyde (MDA) level, superoxide dismutase (SOD), and reduced glutathione peroxidase (GSH-Px) activities.

According to the results obtained, there was a statistically significant decrease in MDA levels and significant increase in SOD levels of rats which were applied swimming exercise.

In conclusion, it was found out that the exercises applied in different periods and volumes have oxidative stress levels of cerebellar tissue. Through application of different exercise programs, different parts of brain would be affected and special training programs can be developed in order to increase physical performance related to brain's functions.

Keyword: Cerebellum, Swimming Exercise, Treadmill, Oxidative Stress.

► Poster No. 107

The radioprotective effects of propolis and caffeic acid phenethyl ester on radiation-induced oxidative/nitrosative stress in brain tissue.

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Head and neck cancer patients treated with radiotherapy suffer severe side effects during and following their treatment. Efforts to decrease toxicity of irradiation to normal tissue, organs and cells have led to searching for cytoprotective agent. Investigations for effective and non-toxic compounds with radioprotective capability