

Content of Special Issue

Editorial	5
Ethanol and magnesium suppress nickel-induced bursting activity in leech Retzius nerve cells	
Dhruba Pathak, Srdjan Lopicic, Marija Stanojevic, Aleksandra Nedeljkov, Dragan Pavlovic, Dusan Cemerikic and Vladimir Nedeljkov	9
Acetylcholinesterase as a potential target of acute neurotoxic effects of lindane in rats	
Danijela Vučević, Nataša Petronijević, Nevena Radonjić, Aleksandra Rašić-Marković, Dušan Mladenović, Tatjana Radosavljević, Dragan Hrnčić, Dragan Djurić, Veselinka Šušić, Macut Djuro and Olivera Stanojlović	18
High dose of ethanol decreases total spectral power density in seizures induced by D,L-homocysteine thiolactone in adult rats	
Aleksandra Rašić-Marković, Dragan Djuric, Dragan Hrnčić, Helena Lončar-Stevanović, Danijela Vučević, Dušan Mladenović, Predrag Brkić, Macut Djuro, Ivana Stanojević and Olivera Stanojlović	25
Wavelet and fractal analysis of rat brain activity in seizures evoked by camphor essential oil and 1,8-cineole	
Milka Čulić, Goran Keković, Gordana Grbić, Ljiljana Martać, Marina Soković, Jelena Podgorac and Slobodan Sekulić	33
Effect of continuous exposure to alternating magnetic field (50 Hz, 0.5 mT) on serotonin and dopamine receptors activity in rat brain	
Branka Janać, Gordana Tovilović, Mirko Tomić, Zlatko Prolić and Lidija Radenović	41
The effect of ascorbate supplementation on the activity of antioxidative enzymes in the rat hypothalamus and adrenals	
Sinisa Djurasevic, Gordana Cvijic, Jelena Djordjevic, Iva Djordjevic, Nebojsa Jasnic and Predrag Vujovic	47
The effect of acute or/and chronic stress on the MnSOD protein expression in rat prefrontal cortex and hippocampus	
Dragana Filipović, Jelena Zlatković and Snežana B. Pajović	53
Regional changes in ectonucleotidase activity after cortical stab injury in rat	
Ivana Bjelobaba, Mirjana Stojiljkovic, Irena Lavrnja, Danijela Stojkov, Sanja Pekovic, Sanja Dacic, Danijela Laketa, Ljubisav Rakic and Nadezda Nedeljkovic	62
Ribavirin administration alters ectonucleotidase activities in experimental autoimmune encephalomyelitis	
Irena Lavrnja, Nadezda Nedeljkovic, Ivana Bjelobaba, Danijela Stojkov, Sanja Dacic, Sanja Pekovic, Ljubisav Rakic, Marija Mostarica-Stojkovic, Stanislava Stosic-Grujicic and Mirjana Stojiljkovic	69
The new experimental model for behavioral investigations in animal studies	
Zdravko Obradovic, Suzana Pantovic, Gvozden Rosic, Zorica Selakovic and Mirko Rosic	77
Dynamic response of blood vessel in acute renal failure	
Suzana Pantovic, Gvozden Rosic, Zdravko Obradovic, Goran Rankovic, Nenad Stojiljkovic and Mirko Rosic	87
Effects of hydroperoxides on contractile reactivity and free radical production of porcine brain arteries	
Darco Stevanovic, Dayong Zhang, Anneke Blumenstein, Dragan Djuric and Helmut Heinle	93
Human platelets perfusion through isolated guinea-pig heart: the effects on coronary flow and oxidative stress markers	
Slobodan Novokmet, Vladimir Lj. Jakovljevic, Slobodan Jankovic, Goran Davidovic, Nebojsa Andjelkovic, Zvezdan Milanovic and Dragan M. Djuric	98
Comparative effects of L-arginine and vitamin C pretreatment in SHR with induced postischemic acute renal failure	
Zoran Miloradović, Nevena Mihailović-Stanojević, Jelica Grujić Milanović, Milan Ivanov, Gordana Kuburović, Jasmina Marković-Lipkovski and Đurdica Jovović	105

Effects of angiotensin II type-1 receptor blocker losartan on age-related cardiovascular risk in spontaneously hypertensive rats

Nevena Mihailović-Stanojević, Zoran Miloradović, Jelica Grujić-Milanović, Milan Ivanov and Djurdjica Jovović

112

Effect of simvastatin on proinflammatory cytokines production during lipopolysaccharide-induced inflammation in rats

Lana Nežić, Ranko Škrbić, Silva Dobrić, Miloš P. Stojiljković, Svjetlana S. Šatara, Zoran A. Milovanović and Nataša Stojaković

119

Early detection of myocardial viability by hyperbaric oxygenation in patients with acute myocardial infarction treated with thrombolysis

Milica Dekleva, Miodrag Ostojic, Aleksandar Neskovic, Sanja Mazic, Alja Vlahovic, Jelena Suzic Lazic and Nikola Dekleva

127

Attenuation of cold restraint stress-induced gastric lesions by an olive leaf extract

Dragana Dekanski, Snežana Janićijević-Hudomal, Slavica Ristić, Nevena V. Radonjić, Nataša D. Petronijević, Vesna Piperski and Dušan M. Mitrović

135

Effects of protamine sulphate on spontaneous and calcium-induced contractile activity in the rat uterus are potassium channels-mediated

Zorana Oreščanin-Dušić, Slobodan Milovanović, Ratko Radojičić, Aleksandra Nikolić-Kokić, Isabella Appiah, Marija Slavić, Nedо Čutura, Stevan Trbojević, Mihajlo Spasić and Duško Blagojević

143

Diltiazem prevention of toxic effects of monosodium glutamate on ovaries in rats

Vladimila Bojanović, Zoran Bojanović, Stevo Najman, Todorka Savić, Vladimir Jakovljević, Staša Najman and Snežana Jančić

149

Neonatal influence of monosodium glutamate on the somatometric parameters of rats

Milan Ćirić, Stevo Najman, Vladmila Bojanović, Snežana Cekić, Milkica Nešić and Nela Puškaš

155

Precancerous morphologic and functional aberrations in the rat mammary glands carcinogenesis

Ivana Joksimović, Vladmila Bojanović, Slaviša Jančić, Zoran Bojanović, Jelena Živanov-Čurlis, Sanja Perić and Snežana Jančić

162

The irritative property of α-tricalcium phosphate to the rabbit skin

Zvezdana Kojic, Dobrica Stojanovic, Svetlana Popadic, Milan Jokanovic and Djordje Janackovic

168

Calcium blocking activity as a mechanism of the spasmolytic effect of the essential oil of *Calamintha glandulosa* Silic on the isolated rat ileum

Suzana V. Brankovic, Dusanka V. Kitic, Mirjana M. Radenkovic, Slavimir M. Veljkovic and Tatjana D. Golubovic

174

Adipose tissue-derived nerve growth factor and brain-derived neurotrophic factor: results from experimental stress and diabetes

Federica Sornelli, Marco Fiore, George N. Chaldakov and Luigi Aloe

179

Insulin resistance and chronic inflammation are associated with muscle wasting in end-stage renal disease patients on hemodialysis

Zorica Rašić-Milutinović, Gordana Peruničić-Peković, Danijela Ristić-Medić, Tamara Popović, Maria Glibetić and Dragan M. Djurić

184

Serum and erythrocyte membrane phospholipids fatty acid composition in hyperlipidemia: effects of dietary intervention and combined diet and fibrate therapy

Danijela Ristic-Medic, Slavica Suzic, Vesna Vucic, Marija Takic, Jasna Tepsic and Marija Glibetic

190

Overweight in trained subjects – are we looking at wrong numbers? (Body mass index compared with body fat percentage in estimating overweight in athletes.)	
<i>Sanja Mazic, Marina Djelic, Jelena Suzic, Slavica Suzic, Milica Dekleva, Dragan Radovanovic, Ljiljana Scepanovic and Vesna Starcevic</i>	200
Oxidative stress biomarker response to concurrent strength and endurance training	
<i>Dragan Radovanovic, Milovan Bratic, Mirsad Nurkic, Tatjana Cvetkovic, Aleksandar Ignjatovic and Marko Aleksandrovic</i>	205
Live monitoring of brain damage in the rat model of amyotrophic lateral sclerosis	
<i>Danijela Bataveljić, Nevena Djogo, Ljubica Župunski, Aleksandar Bajić, Charles Nicaise, Roland Pochet, Goran Bačić and Pavle R. Andjus</i>	212
Cranial irradiation modulates hypothalamic-pituitary-adrenal axis activity and corticosteroid receptor expression in the hippocampus of juvenile rat	
<i>Natasa Velickovic, Ana Djordjevic, Dunja Drakulic, Ivana Stanojevic, Bojana Secerov and Anica Horvat</i>	219
The efficacy of two protocols for inducing motor cortex plasticity in healthy humans – TMS study	
<i>Nela V. Ilić, Jelena Sajić, Melanija Mišković, Jelena Krstić, Sladjan Milanović, Vladislava Vesović-Potić, Miloš Ljubisavljević and Tihomir V. Ilić</i>	228
The effect of inhibition of nitric oxide synthase on aluminium-induced toxicity in the rat brain	
<i>Ivana D. Stevanović, Marina D. Jovanović, Ankica Jelenković, Milica Ninković, Mirjana Đukić, Ivana Stojanović and Miodrag Čolić</i>	235
Nitric oxide synthase inhibitors partially inhibit oxidative stress development in the rat brain during sepsis provoked by cecal ligation and puncture	
<i>Milica B. Ninković, Živorad M. Maličević, Ankica Jelenković, Mirjana M. Đukić, Marina D. Jovanović and Ivana D. Stevanović</i>	243
Autonomic dysfunction in alcoholic cirrhosis and its relation to sudden cardiac death risk predictors	
<i>Branislav Milovanovic, Nikola Milinic, Danijela Trifunovic, Mirjana Krotin, Branka Filipovic, Vesna Bisenic and Dragan Djuric</i>	251
Preconditioning with glucose-insulin-potassium solution and restoration of myocardial function during coronary surgery	
<i>Miomir Jovic, Sinisa Gradinac, Ljiljana Lausevic-Vuk, Dusko Nezic, Predrag Stevanovic, Predrag Milojevic and Bosko Djukanovic</i>	262
Predictive value of serum bicarbonate, arterial base deficit/excess and SAPS III score in critically ill patients	
<i>Maja Surbatovic, Sonja Radakovic, Miodrag Jevtic, Nikola Filipovic, Predrag Romic, Nada Popovic, Jasna Jevdjic, Krasimirka Grujic and Dragan Djordjevic</i>	271
Screening of vascular calcifications in patients with end-stage renal diseases	
<i>Tatjana Damjanovic, Zivka Djuric, Natasa Markovic, Sinisa Dimkovic, Zoran Radojicic and Nada Dimkovic</i>	277
The righting reflex from a supine to a prone position in the guinea pig fetus	
<i>Slobodan Sekulić, Damir Lukač, Miodrag Drapšin, Vesna Suknjava, Goran Keković, Gordana Grbić and Ljiljana Martać</i>	284