

CONTENTS

*Experimental Studies***Relationship between serotonin and norepinephrine levels and the preimplantation embryo development in rat**

Mihalik J, Maslankova J, Hodorova I, Ferenc P, Rybarova S, Marekova M 52
Impact of chronic clorgyline administration on the rat preimplantation embryo development and monoamine levels was recorded. We suppose that negative effect of low clorgyline dose compared to both control and high clorgyline dose could be the consequence of the altered monoamine levels.

The impact of serotonergic stimulation on reelin and glutamate decarboxylase gene expression in adult female rats

Lakatosova S, Celec P, Schmidtova E, Kubranska A, Durdiakova J, Ostatnikova D 58
We have shown that administration of serotonin receptor agonist resulted in decreased expression of reelin (RELN) and glutamate decarboxylase (GAD1) in the cerebellum of adult female rats. We propose that this phenomenon might be relevant in the pathogenesis of autism.

*Clinical Studies***The importance of ambulatory blood pressure monitoring (ABPM) in patients with tinnitus**

Gaspar L, Jurcova D, Ocadlik I, Makovnik M, Hlinstakova S, Bendzala M, Gasparova E, Fulleova M, Dukat A 63
Subjective tinnitus is a symptom going along with other diseases. Arterial hypertension could be one of the reasons. We have studied 18 subjects with tinnitus, without previous history of hypertension, using a 24-hour ABPM. In two-thirds of our patients we confirmed arterial hypertension, which had not been known before. The treatment of hypertension can decrease the risk of its complications.

Immunohistochemical evaluation of Pi class glutathione S-transferase expression in invasive breast carcinoma

Vecanova J, Hodorova I, Mihalik J, Benicky M, Kluchova D, Rybarova S 67
GSTP1 is potentially involved in tumour chemoresistance. The study described the frequency of GSTP1 expression in two major types of invasive breast cancer. Majority of carcinomas shows GSTP1 positivity. Immunohistochemistry is a useful method for investigating the expression and cellular localization of GSTP1 within tumours. It could be applied to a routine clinical test and it can serve as a marker of resistance to chemotherapy.

Effect of long-term oral anticoagulant therapy on bone mineral density and bone turnover markers: a prospective 12 month study

Stenova E, Steno B, Killinger Z, Baqi L, Payer J 71
This study was aimed at evaluating the effect of warfarin treatment on BMD and bone turnover markers and determining the relationship between BMD and bone turnover markers. The long-term use of coumarin was not associated with decreased bone mineral density in our study, but the significantly lower OC and CTx serum levels in coumarin-treated patients suggest that vitamin K has an influence on bone turnover.

Doppler-derived myocardial performance index in healthy children

Jurko A Jr, Jurko A, Minarik M 77
The myocardial performance index (MPI) is a simple quantitative, non-geometric index of ventricular function and is readily applicable for evaluation of the right and left ventricle function. It is independent from ventricular geometry, blood pressure, heart rate and it appears to be of great prognostic value in many different clinical settings.

*Perspectives***Merkel cells – review on developmental, functional and clinical aspects.**

Polakovicova S, Seidenberg H, Mikusova R, Polak S, Pospisilova 80
The aim of this review is to introduce Merkel cells - the neuroendocrine cutaneous cells and to provide an basic overview on the theoretical background of function, development and clinical importance of Merkel cells.

*Reviews***Hospitalist-Pharmacist collaboration****A success story of the integration of a clinical pharmacist on the multi-disciplinary hospitalist team**

Hemerson P, Izakovic M 88
Analyses of hospital-based clinical pharmacist interventions have revealed an improvement in a variety of measures. Integration of the pharmacist on the interdisciplinary team leads to collaboration on projects such as medication reconciliation, antibiotic stewardship, venous thromboembolism prophylaxis and many more to be discussed.

Induced therapeutic hypothermia following cardiac arrest in children

Kobr J, Pizingerova K, Sasek L, Fremuth J, Fikrlova S .. 92
Evidence-based medicine currently dictates that in children, the controlled hypothermia may be applied only to the first degree and only in cases of neonatal encephalopathy and acute brain injury. Current recommendations are limited in terms of indication as well as by their very low degree of relevance. The method of therapeutic hypothermia is not a predictor of survival but its proper implementation can be the key to the recovery of functions of body organs and systems after successful cardiopulmonary resuscitation.

*Case Report***Ceftriaxone induced thrombocytopenia in a child**

Akbayram Sinan, Akgun Cihangir, Dogan Murat, Caksen Huseyin, Oner Ahmet Faik 97
A variety of diseases, hereditary conditions, toxins and drugs may cause thrombocytopenia. Thrombocytopenia induced by ceftriaxone has been rarely reported. In this case, ceftriaxone-induced thrombocytopenia is presented in a 2-year-old girl due to rare presentation.