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*Experimental Study***Effects of Estrogen Replacement Therapy on Vascular Endothelial Growth Factor Expression in Choroidal and Retinal Vasculature**

Dundar SO, Ozcura F, Cetin ED, Beder N, Dundar M.... 473

To investigate the effects of estrogen replacement therapy (ERT) on vascular endothelial growth factor (VEGF) expression in choroidal and retinal vasculature in experimental rat model. It was shown that ERT increases VEGF expression in choroidal and retinal vasculature, in particular in non-ovariectomized rats. Our findings suggest that ERT may be a risk factor for choroidal and retinal angiogenesis. Further studies are needed to evaluate the risks or benefits of exogenous estrogen supplementation for the choroidal and retinal angiogenesis in women.

Pralidoxime – the gold standard of acetylcholinesterase reactivators – reactivation in vitro efficacy

Kuca K, Hrabanova M, Soukup O, Tobin G, Karasova J, Pohanka M 502

Pralidoxime is considered a gold standard of acetylcholinesterase reactivators - antidotes used in case of nerve agent poisonings. It has been commercially available for many years. However, several studies deem this oxime an old-fashion antidote. From the obtained results, it is clear that pralidoxime seems to be a poor reactivator of AChE inhibited by organophosphorous AChE inhibitors and thus cannot be labeled as a universal reactivator.

*Clinical Studies***The oxidative by-product, hydroxyl radical, damaged immunoglobulin-G in patients with non-insulin dependent diabetes mellitus**

Trivendra Tripathi, Zafar Rasheed 477

Free radical-mediated oxidative damage and consequent protein modifications are important mediators of cell toxicity and disease pathogenesis. Earlier investigations from our laboratory revealed an increased oxidative damage in diabetes patients and hydroxyl radicals ($\cdot\text{OH}$) caused an extensive damage to immunoglobulin G (IgG) and oxidatively modified IgG was found to be highly immunogenic in rabbits. Here, for the first time, we evaluated the role of hydroxyl radical-damaged IgG ($\cdot\text{OH}$ -IgG) in non insulin dependent (Type 2) diabetes patients.

Circulating levels of VEGF family and their receptors in hepatocellular carcinoma

Kemik O, Sumer A, Sarbay Kemik A, Purisa S, Tuzun S ... 485

To analyze the serum levels and prognostic significance of vascular endothelial growth factor (VEGF) family (VEGF-A, -C and -D) and their receptors (VEGFR-1 and -2) in patients with hepatocellular carcinoma. Serum VEGF levels are significantly in the same cohort of patients with variable clinic pathological features and prognostic values. The measurement of VEGF-A and its VEGFR-1 levels in sera may reflect the development of tumor, metastasis and angiogenesis.

Time course of nontyphoid salmonellosis in Slovakia 1957–2008

Mikulecky M Jr, Mikulecky M Sr 489

Hypothesis was tested concerning relationship between salmonellosis and Moon gravity. Presence of significant ($\alpha = 0.05$)

periodicities in daily data from Bratislava 2005–6 and yearly ones from Slovakia 1957–2008 resulted in nonrejection of gravitational hypothesis. Possible causal relation between gravity and Salmonella virulence seems to be corroborated by experiments in NASA laboratories.

The effects of E-cadherin and bcl-2 on prognosis in patients with breast cancer

Kavgaci H, Yildiz B, Fidan E, Reis A, Ozdemir F, Cobanoglu U, Can G 493

E-cadherin, bcl-2, and p53 did not have any significant prognostic value for our patients. More advanced studies are needed on the effect of these markers on prognosis of breast cancer.

An evaluation of the tuberculin skin test for anti TNF alpha prophylaxis in patients with ankylosing spondylitis and rheumatoid arthritis

Karkucak M, Capkin E, Ozsu S, Nuhoglu I, Erol M, Yilmaz G, Gokmen F 498

The tuberculin skin test (TST) has recently been proposed as a screening procedure for latent TB prior to anti-tumor necrosis factor (TNF) alpha therapy. Our aim was to evaluate TST levels in patients receiving anti TNF alpha due to ankylosing spondylitis (AS) and rheumatoid arthritis (RA). This is the first study to evaluate the correlation between the use of multiple immunosuppressive agents and TST. We determined that TST is correlated with disease duration in AS and with the use of multiple immunosuppressive agents in RA.

The relationship between histomorphological characteristics and Ki-67 proliferation index in meningiomas

Akyildiz EU, Oz B, Comunoglu N, Aki H 505

In this study, we found a statistically significant relationship between Ki-67 PI and mitotic activity, necrosis, loss of architecture, small cell change, brain invasion. In contrast to brain invasion, no significant relationship was present between dura or bone invasion and Ki-67 PI. We identified a significant increase in the histological grade, mitotic activity and Ki-67 PI value of recurrent tumors, as compared to primary ones.

*New Trends***Digital Mammography – a new trend in breast carcinoma diagnostics**

Vanovcanova L, Lehotska V, Rauova K 510

A new full field digital mammograph was installed at St. Elisabeth Oncology Institute in Bratislava 13 months ago. During this period we gained experience using this equipment and compared it to the foreign countries. Digital mammography is the state-of-the-art method of the early stages breast carcinoma detection especially when enhanced with a CAD system. A considerable contribution of digital mammography will find its use in interventional mammodiagnostic methods.

*Topical Review***Retinopathy of prematurity – epidemics, incidence, prevalence, blindness**

Gergely K, Gerinec A 514

Currently, there are enough financial resources in industrial most developed countries to provide quality health care to the risk

population of premature children. Neonatological units are equipped with state-of-the-art technological background, and highly qualified personnel are employed at the units. This as well allows providing optimum care of extremely immature newborns. ROP prevalence in these countries reaches approximately 5–8 %. Today, a boom of surviving premature newborns can be seen in countries with medium-developed economy. Nevertheless, limited financing resources do not allow for standard high-level care. In such countries, the prevalence reaches up to 30 %. In this respect, the "third ROP epidemic" is mentioned. Birth weight and gestational age parameters achieve significantly lower values in ROP-infants than in those not affected by the disease.

Case Report

Thrombelastography during an acute normovolemic hemodilution in patient undergoing radical retropubic prostatectomy

Maly R, Gal R, Chamzin A, Peska J 518

The perioperative bleeding was minimalised through acute normovolaemic haemodilution (ANH). During the process we monitored the patient's hemocoagulation profile. We argue that during ANH, the hypercoagulatory state appears in the patient - and even during the introduction of a combined solution of both crystalloids and colloids. In fact, during ANH it should not be recommended to provide a substitute for the patient's blood using only a single crystalloid solution alone.