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*Experimental Studies***Modulatory role of melatonin on superoxide release by spleen macrophages isolated from alloxan-induced diabetic rats**

Eduardo Luzia França, Nagilla Daliane Feliciano, Karina Aparecida Silva, Carlos Kusano Bucalen Ferrari, Adenilda Cristina Honorio-França ..... 517

An increased risk of infections in diabetic patients could be due to defects in the immunological defense mechanisms such as impairment of macrophage activation. The aim of this study was to evaluate the modulatory effect of melatonin on superoxide release by spleen macrophages isolated from alloxan-induced diabetic insulin treated or non-treated rats. The effects of hyperglycemia on superoxide dismutase were also studied.

**Prebiotic foodstuffs and their health benefits in experiment**

Hijova E, Chmelarova A, Bomba A, Zitnan R ..... 523

The aim of the present experimental study was to evaluate the effect of prebiotic on chemically induced carcinogenesis in rats fed with high fat diet (HF). Prebiotics may have potential health implications for protection against colon cancer.

**The effects of electromagnetic fields on peripheral blood mononuclear cells in vitro**

Ayten Atasoy, Yusuf Sevim, Ismail Kaya, Mustafa Yilmaz, Ahmet Durmus, Mehmet Sonmez, Omay SB, Feyyaz Ozdemir, Ercüment Ovali ..... 526

A discussion about the adverse effects of electromagnetic waves on the biological life has been ongoing since the discovery of electricity in the 19th century. These data suggest that electromagnetic signals could affect the functional capacity of the peripheral blood mononuclear cells by changing their adhesion ability. Maybe these alterations are the sign of the immune system modulation. More comprehensive studies are needed, involving higher number and more lines of cells.

**The healing role of erythropoietin in the obstructive vs nonobstructive left colonic anastomosis**

Faruquzzaman, Saroj Kumar Mazumder ..... 530

We aimed to evaluate possible effects of erythropoietin on the healing of anastomosis in both obstructive and non-obstructive states. It was an experimental study on guinea pigs. Although erythropoietin had positive effects on pressure in the group IV when compared to the group II, it had no effect in the group III. Despite an increased tissue hydroxyproline levels in the group IV, erythropoietin failed to show any effects in the group III.

*Reviews***Why is pulmonary hypertension so frustrating?**

Kaldararova M ..... 536

Pulmonary hypertension (PH) is a relatively uncommon but on the other hand all too frequently fatal disorder of the pulmonary arteries. The effect of conventional PH management of the past decades was insufficient. The new trend, the so called specific therapy, improves to some point patients' clinical course and life expectancy. It seems to have the potential to slow down the progression of the disease and due to new molecules there might be a hope for the future even to reverse the entire disease process.

**Specific aspects of acute pancreatitis**

Mifkovic A, Skultety J, Pindak D, Pechan J ..... 544

Acute pancreatitis (AP) is still a disease with a significant mortality rate, mainly concerning the severe forms of this disease. Mortality in acute pancreatitis has 2 peaks. The first peak is caused by systemic inflammatory response syndrome (SIRS), which takes place in the first week of the disease. Sepsis is responsible for a second peak.

*Clinical Studies***Consideration of endoscopic retrograde cholangiopancreatography in cases of acute biliary pancreatitis**

Horakova M, Vadovicova I, Katuscak I, Janik J, Makovnik P, Sadlonova J ..... 553

The important question to be answered in all cases of acute biliary pancreatitis is whether or not a calculous biliary obstruction is still present. Answering this question conditions subsequent management, including the need for endoscopic retrograde cholangiopancreatography. The aim of this study was to determine the relationship between persistent common bile duct stone and laboratory values, and dilation of bile duct in order to find possible significant associations.

**Evaluation of bone mass density on patients with prostate cancer prior to the start of androgen deprivation therapy**

Ziaran S, Goncalves FM, Wendl J, Trebaticky B, Breza J Sn ..... 559

Osteopenia is very common in men with prostate cancer who receive ADT. It is advisable to examine BMD prior to the start of ADT, and periodically thereafter. BMD measurement prior to ADT via DXA should be a common practice that can help in early detection of osteoporosis.

**Paediatric forearm fractures: functional outcome of conservative treatment**

Nazari Ahmad Tarmuzi, Shalimar Abdullah, Zulkiflee Osman, Srijit Das ..... 563

Forearm fractures are common in the paediatric age group. Closed reduction and casting are the primary means of treatment in over 90 % of these fractures. Resultant deformities are usually a product of indirect trauma involving angular loading combined with rotational deformity and fragment displacement. Conservative treatment is still an acceptable form of treatment especially for stable forearm fractures in children achieving excellent outcomes.

**Diagnosis and management of local and locoregional recurrence of colorectal carcinoma**

Prochotsky A, Okolicany R, Sekac J, Skultety J ..... 569

All intraabdominal forms of recurrence of colorectal carcinoma, other than metastases in the liver, are considered a locoregional treatment failure. Maximum frequency of local recurrence of CRC occurs in the first two years following the initial potentially curative resection. Intensive follow-up in this period is therefore reasonable. It should be based on case history, clinical examination and examination of tumor markers (particularly CEA). Other examinations are indicated only for patients with abnormal findings or during normal annual check-ups.

*Case Report*

**A missed diagnosis of the cervical spine fracture. An autopsy case report and literature review**

Dilek Durak, Bülent Eren, Recep Fedakar,  
Nursel Türkmen ..... 574

The authors report an autopsy case of a 64-year-old man who was injured by a falling tree on his head, caused a cervical spine fracture and the injury was diagnosed by an autopsy. The goal of this study was to analyze the reasons for the missed diagnosis to provide recommendations for the optimal examination of patients with suspected cervical spine injuries.

*Topical Review*

**Clinical manifestations of neurosarcoidosis**

Titlic M, Bradic-Hammoud M, Miric L, Punda A ..... 576  
Neurosarcoidosis is registered in 5 % of patients with sarcoidosis. Clinical manifestations of sarcoidosis are numerous and diverse.

*Congenital Anomalies*

**Congenital anomalies of the ribs: an autopsy case report**

Dilek Durak, Bülent Eren, Recep Fedakar,  
Nursel Türkmen ..... 580

The authors describe a medico-legal autopsy case of a three-day newborn girl. This was the fifth pregnancy of the mother who was 34 years at that time. Analyses of the deceased's blood and urine were negative for drugs. In this case, genetic study was not done. Based on all information available, the cause of death was not definitely determined.