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*Nobel Prize***Does incorporation of gene for green fluorescent protein in BP6 fibrosarcoma tumor cells depress their intraperitoneal growth in rats? (In Honour of Nobel Prize Laureates 2008 – Osamu Shimomura, Martin Chalfie, Roger Y. Tsien)**

Valaskova Z, Lackovicova L, Vrabcovna M, Bizik J, Perzelova A, Macikova I, Danihel L, Kinova S, Buckingham T, Hulin I 127

This manuscript was in honour of Nobel Prize in chemistry “for the discovery and development of the green fluorescent protein, GFP” to Osamu Shimomura, Martin Chalfie, and Roger Y. Tsien, simultaneously a brief information about experience with GFP in experimental tumorigenesis used this study is also presented.

*Experimental Study***Ischemia-reperfusion injury in kidney transplantation from non-heart-beating donor – do antioxidants or antiinflammatory drugs play any role?**

Treska V, Kobr J, Hasman D, Racek J, Trefil L, Reischig T, Hes O, Kuntscher V, Molacek J, Treska I ... 133

Ischemia reperfusion injury (IRI) is a serious problem of transplanted kidneys from a non-heart-beating donor (NHBD). IRI is probably the main cause of primary dysfunction or delayed graft function. The aim of this study was to demonstrate the reduction of IRI by intravenous application of antioxidants or immunosuppressives to the recipient before the kidney transplantation in an experimental model.

*Review***B-cell activating factor, its role in autoimmunity, and targeting in autoimmune diseases**

Krivosikova M, Dallos T, Maslinski W, Buc M 137

BAFF is a key survival factor during B-cell maturation and is essential also for the development of B cell tolerance. BAFF is considered to be one of the principal factors, which regulate the size and composition of the B cell compartment and acts as an important driving factor of B cell hyperplasia and autoantibody production in autoimmune processes.

*Clinical Studies***Left atrial volume as a predictor of heart function**

Valocik G, Mitro P, Druzbacka L, Valocikova I 146

To determine the relation of left atrial volume to left ventricular systolic and diastolic function, we retrospectively analyzed 268 echocardiographic findings. We found strong association between increasing left atrial volume and impaired systolic and diastolic function of the left ventricle. The strongest association appeared between increased left atrial volume and left ventricular mass.

Oxidative stress and metabolic syndrome in obese adults with and without controlled diet restriction

Skalicky J, Muzakova V, Kandar R, Meloun M, Rousar T 152

Metabolic syndrome (MetS) represents a collection of markers associated with cardiovascular morbidity and mortality. Due to its high prevalence and steady increase of the occurrence, prevention or management of MetS is of paramount importance. The aim of our study was to evaluate MetS occurrence and extent of oxidative stress by comparing obese adults after diet optimization with untreated controls.

Surgical treatment of phytozoars causes acute small intestinal obstruction

Dirican A, Unal B, Tatli F, Sogotlu G, Ozgor D, Piskin T, Kayaalp C, Kirimlioglu V 158

Phytozoars should be considered in the differential diagnosis of acute small intestinal obstruction in patients with prior gastric surgery, poor dentition, or consume fiber-rich foods. Abdominal CT is useful for both diagnosis and for the decision to perform emergency surgery. When possible, the phytozoar should be fragmented and milked into the cecum. Laparoscopic fragmentation may be useful in such cases.

Significance of MRI in the treatment of perianal fistula

Hutan M, Hutan M Jr, Satko M, Dimov A 162

Authors compare preoperative MRI with external coil and operative findings in 14 patients with perianal fistula. In 12 patients results matched. Authors consider and discuss significance of MRI in choosing optimal operation to prevent recurrence.

Preoperative detection of parathyroid adenomas with Tc-99m MIBI and Tc-99m pertechnetate scintigraphy: histopathological and biochemical correlation with Tc-99m MIBI uptake

Murat Akin, Tamer Atasever, Osman Kurukahvecioglu, Mehmet Dogan, Devrim Gokaslan, Aylar Poyraz, Hande Koksall, Ferit Taneri 166

The objective of this study was to compare the dual phase MIBI scintigraphy with MIBI and Tc-99m pertechnetate (MIBI+Tc-99m) study in defining the parathyroid adenomas, and to evaluate the effect of histologic and biochemical characteristics on the imaging of parathyroid adenomas with Tc-99m methoxyisobutylisonitrile (MIBI) scintigraphy.

Vascularized free fibular graft in the treatment of congenital pseudarthrosis of tibia

Kokavec M, Kusin M, Palencar D 170

Aim of the study was to evaluate the results of the patients with “congenital pseudarthrosis of tibia” treated by vascularized fibular graft transferred from the contralateral calf. Authors believe that after an accurate preoperative planning in cooperation with the microsurgeon, the treatment of congenital pseudarthrosis of the tibia by vascularized fibular graft should be considered as a very effective, accurate and relatively safe method.

The role of three-dimensional imaging in the investigation of IUD malposition

Kalmantis K, Daskalakis G, Lymberopoulos E, Stefanidis K, Papantoniou N, Antsaklis A 174

Transvaginal sonography may fail to detect IUD misplacement in about 9 % of cases, but three-dimensional ultrasound (3D) provides precise evaluation of IUD malposition because structures that are not located in one single plane can be imaged simultaneously. 3D ultrasound is safer and more secure than hysteroscopy for IUD evaluation.

Orthopaedic patterns of retroperitoneal tumors in pediatric population

Brdar R, Petronic I, Abramovic D, Nikolic D, Cirovic D .. 178

The paper presents three children of various ages with tumors of different histology localized in the retroperitoneum. The children underwent investigation as orthopedic cases at the Orthopedic Department of the Belgrade University Childrens' Hos-

pital. If symptomatology of retroperitoneal tumors is suspected and particularly in insufficiently clear cases, one should always perform echsonography of the retroperitoneum as a non-agressive, simple, readily available and reliable diagnostic method.

Immunofluorescent study of polyps in nose and paranasal cavities

Misko Zivic, Milica Antic 181
 Polyps of nose and paranasal cavities are today very often guise, and theirs frequency are grower with progressing chemical irritating factors and allergens, it's intruding necessary to their researching. The development of allergology and immunology help in detection of etiopathogenetical mechanisms of polyposis development, like the disturbance in mucus immunity.

Direct current therapy with/without lidocaine iontophoresis in myofascial pain syndrome

Arzu Kaya, Ayhan Kamanli, Ozge Ardicoglu, Salih Ozgoemen, Fatma Ozkurt-Zengin, Yilmaz Bayik ... 185
 Direct current therapy with/without lidocaine iontophoresis were determined to be effective treatment modalities in TrP management. These treatment modalities are non-invasive, cost effective and provide long term improvement. Thus, these modalities could be safely used in the management of MPS with minimal side effects, particularly if patients may not accept injection or other treatments.

Case Reports

Anterior ischemic optic neuropathy comorbid with Factor V Leiden and PAI-1 4G/5G mutation

Titlic M, Karaman K, Andelinovic S 192
 Acute anterior ischemic optic neuropathy (AION) is a disabling disease which impairs visual functions. AION is characterized by ischemic injury of the optic nerve caused by hypoperfusion in the short posterior ciliary arteries supplying the optic nerve head.

Spontaneous regression of complex cystic renal mass of Bosniak class IV – a rare phenomenon

Weibl P, Lutter I, Romancik M, Karwandgar M, Kollarik B, Obsitnik M 195
 The authors describe a spontaneous partial regression of complex renal cyst Bosniak IV during the observation of complex cystic renal masses. A 66 year old male high risk patient (ASA score 3–4) refused all surgical intervention and was suggested for active surveillance strategy.

Peritoneal hydatidosis with ileus

Necdet Ozalp, Ozgur Akgul, Hayrettin Dizen, Erdal Gocmen, Mehmet Keskek, Mesut Tez, Mahmut Koc 197
 The parasitic infection hydatidosis or echinococcosis, is a parasitic infection caused most frequently by flatworm Echinococcus granulosus. Hydatidosis is endemic in Turkey where animal husbandry is common. Eventhough, Hydatid disease can develop anywhere in the human body it is most frequently occurs in the liver and then the lungs. Rupture of hydatid cysts into the peritoneal cavity, although rare, still presents a challenge for the surgeon.