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*Molecular Analyses***A comparative study of EGFR mutation screening methods in non-small cell carcinoma of lung**

Gombos Z, Danihel L, Puttaswamy K, Brose M 365

Epidermal growth factor receptor (EGFR) is a transmembrane receptor tyrosine kinase of the ERBB2 family that has important roles in the proliferation and metastasis of tumor cells. It is frequently overexpressed in common solid tumors and has become a favored target for orally administered small-molecule tyrosine kinase inhibitors (TKI) and monoclonal antibody-based therapy.

*Experimental Study***Ovarian folliculogenesis: Detrimental effect of prenatal exposure to cyclophosphamide: a preliminary study**

Ray B, Potu BK 369

In this experiment, pregnant rats were randomly assigned into two groups, control group and cyclophosphamide treatment group. The animals in the cyclophosphamide treatment group were injected cyclophosphamide was injected intraperitoneally from day 10 of gestation till 20th day, at 2 mg/kg of body weight. The pregnant rats were sacrificed on gestation day 20 and the fetus was collected the fetus. The collected fetuses were processed for sectioning and stained with haematoxyline and eosin for microscopical observation of the ovaries. We conclude that cyclophosphamide exposure prevents folliculogenesis by causing anovulation and results in infertility. The same detrimental effect might be seen on human fertility with environmental pollutants which are also metabolites of the drug.

*Clinical Studies***Factors influencing the intermediate outcome in patients with single-ventricle physiology after Fontan operation**

Nosal M, Valentik P, Kantorova A, Nagi AS, Sagat M, Poruban R 373

This study analyses the factors affecting the intermediate outcome following the Fontan procedure for single-ventricle patients in the current era. We evaluated the intermediate survival, factors affecting the Fontan failure and reoperation rate. We found an excellent intermediate survival. Complete common AV canal, duration of pleural effusions and ventilation adversely influence the intermediate outcome.

Growth rates are similar in potentially benign and malignant small renal masses detected incidentally

Kollarik B, Romancik M, Obsitnik M 378

Generally small renal masses grow at slow rate; some of them do not exhibit any growth. Does it mean that they are less aggressive? The aim of our study was to compare the growth of enhancing, non-enhancing solid renal masses, angiomyolipomas and complex renal cystic masses <4 cm in diameter. The vast majority of small solid and complex cystic renal masses exhibit similar slow growth rates. According to these results, urologists can not predict the biological potential of the mass based on radiographic criteria and growth rates only.

Age-related diseases; degenerative aortic valve disease and osteoarthritis

Karkucak M, Kiris A, Capkin E, Durmus I, Ozden G, Cansu A, Tosun M 381

Degenerative aortic valve disease (DAVD) and osteoarthritis (OA) are age-related degenerative diseases whose pathogenesis

involves mechanical stress and local inflammation. Our study has shown that there is no relationship between these diseases that increased with age. However, extensive studies examining pathogenic mechanisms are needed.

Epidemiology of hospitalized burns patients in Taleghani hospital during 2003–2007

Ekrami A, Hemadi A, Latifi M, Kalantar E 384

The objective of this study was to describe the epidemiology of burn injuries referred to Taleghani Burn hospital, Ahvaz and to provide information necessary for the planning and reaching of implementing an effective prevention program. This study provides an inclusive overview of hospitalized burn patients at Taleghani burn hospital. Prevention programs for reducing the risk of burns are needed. Furthermore, high %TBSA and mortality and the presence of multi-drugs resistance bacteria are major worrying problems in our hospital.

*Topical Review***Concept of predictable disinfection in endodontics**

Lazar J, Kotula R 389

Factors influencing the appropriate time to obturate a tooth are the patient's signs and symptoms, pulp and periradicular status, degree of difficulty, and patient management. The current consensus is that one-step treatment procedures are acceptable in cases where the patient exhibits a vital pulp. The removal of normal or inflamed pulp tissue and performance of the procedure under aseptic conditions should result in a successful outcome because of the absence of bacterial contamination.

*Reviews***Do we need new quality markers for chronic heart failure?**

Klabnik A, Murin J, Kycina P 392

Guidelines are not cookbook medicine. Medical decisions for the treatment of chronic heart failure (CHF) are more determined by patient's characteristics than by knowledge of physicians or drug patterns. New quality markers are more favourable, because they have qualitative attributes (are more flexible and adaptable for each CHF patient due to considering objective reasons for deviation from guidelines).

Health of Europeans twenty years after the fall of Berlin wall

Ginter E, Simko V 398

The failure of central planning in the totalitarian systems of the USSR and its satellites adversely affected not only the economy and social relations but also the population health. While in the countries with established democracy (DEM) the general health and the life expectancy (LE) steadily improved, in countries declaring socialism (SOC) the LE was stagnant and in the USSR even decreased. Dramatic changes in Russia after the demise of Soviet Union resulted in an extraordinary destabilization of LE that reached a minimum in 1994.

Microbiological and therapeutical aspects of pneumococcal diseases in the Slovak Republic

Hupkova H, Trupl J, Stankovic I, Simurka P, Bukovsky M, Gezo M 404

In the prospective multicentric microbiological and clinical analysis of otitis media acuta in children under 5 years, pneumococci were isolated in 45.9 %, where 50.8 % of strains were intermediate and fully resistant to penicillin and 47.5 % resistant to macrolid antibiotics. Invasive pneumococcal infections, mostly meningitis and bacteremias, were observed in two studies.

Serotype 14 is the most frequent serotype in physiologically sterile liquids and otitis media liquor in the Slovak Republic.

Case Report

Remodelling of the femoral head after proximal femoral osteotomy for avascular necrosis associated with slipped capital femoral epiphysis

Sponer P, Kucera T 410

Avascular necrosis is the most devastating complication associated with slipped capital femoral epiphysis. However, at present there are no clear guidelines for its treatment. The evaluation of patients who underwent femoral osteotomy for avascular necrosis suggests that the use of this technique resulted in acceptable clinical outcome with bone remodelling.

Morphological Study

Black esophagus: a rare autopsy case

Eren B, Turkmen N, Fedakar R 414

The black esophagus is a rare entity of an acute esophageal necrosis described at endoscopy and typical histological properties of a diffuse mucosal necrosis. The presented case was a 17 year-old girl; admitted to the hospital with an abdominal distention and vomiting, who died soon after admittance. The case was investigated by local prosecutor, as the cause of the death was unknown; a forensic autopsy was mandated and later performed in our department.

Letter to the Editor

Zuffa M 416