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Front cover:


75 Years Alkaloid, Skopje, Republic of Macedonia.


The Institute for Development and Quality Control was officially launched on 11 March 2009. This modern facility covers a surface of 1540 square metres. It is equipped with cutting-edge laboratory and pilot manufacturing equipment that enables the development of new, modern, forms of generic drugs implementing the latest advances in the field of pharmaceuticals. Around 9 million euros have been invested in the Institute for Development and Quality Control, while the necessary funds were provided mostly from Alkaloid's own resources.

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CONTENTS, Vol. 4, No. 4, 2011

Basic Science

Deabas MM, El-Soud NHA, El-Kassem LTA. **In Vitro Inhibition of Growth and Aflatoxin B1 Production of *Aspergillus Flavus* Strain (ATCC 16872) by Various Medicinal Plant Essential Oils.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 345

The extent of inhibition of fungal growth and aflatoxin production was dependent on the type and concentration of essential oils used. The complete inhibition of *Aspergillus flavus* growth was observed at 1000 ppm concentrations of essential oils of basil, coriander, caraway and rosemary. While, essential oils of basil and coriander showed marked inhibition of aflatoxin B1 produced by *Aspergillus flavus* at all concentrations tested 500,750 and 1000 ppm.

Onaolapo AY, Onaolapo OJ, Adewole SA. **Ethanollic Extract of *Ocimum Grattissimum* Leaves (Linn.) Rapidly Lowers Blood Glucose Levels in Diabetic Wistar Rats.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 351

Results showed that ethanolic extract of *Ocimum grattissimum* reduced blood glucose levels and body weight significantly all through the treatment period, that these effects were more rapid with increasing doses of the extract, and the glucose lowering potential of *Ocimum grattissimum* was comparable to that seen following administration of metformin.

Srinath R, Venkataranganna M, Saravanan J. **Anti-hyperlipidemic Activity of Thieno – [2, 3-d] - Pyrimidin-4-(3H)-ones.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 358

The findings of the present study clearly demonstrates that methyl, methoxy, chloro, dimethylamino, dimethoxy and trimethoxy functional groups possess cholesterol-suppressive capacities and has an ability to attenuate the accelerated development of atherosclerosis in hypercholesterolemic models. However, hydroxyl and nitro derivatives did not show any hypolipidemic activity.

Mitevaska E. **Histological Characteristics of Thymus Assessed with Stereological Parameters after Medroxyprogesterone Acetate Application.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 367

The results of this investigation have shown that after application of MPA the presence ratio of parenchyma and stroma is significantly changed in favor of the stroma, which emphasizes the fact that the major morphological characteristic of thymus after application of MPA is atrophy of its parenchyma.

Trajkovska-Dokic E, Stojkovska S, Icev K, Grozdanova A. **Serogrouping and Randomly Amplified Polymorphic DNA Fingerprinting of *Campylobacter Jejuni*.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 372

In this study authors found that RAPD-PCR analysis provide better discrimination of *C. jejuni* strains than serogrouping by Penner's method. Each of the three Penner's antigenic groups comprised different genotypes. RAPD-PCR analysis of *C. jejuni* resulted in the generation of highly specific and reproducible DNA fingerprints that enable discrimination even between isolates of a single bacterial serogroup.

Hodzic R, Piric N, Hodzic M, Kojic B. **Electrophysiological Evaluation of the Incidence of Martin-Gruber Anastomosis in Healthy Bosnian Population.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 376

Martin-Gruber anastomosis (MGA) is the well known anastomosis that occur at the various levels between the median and ulnar nerves. This anastomosis involves axons leaving either the main trunk of median nerve or the anterior interosseous nerve, crossing through the forearm to join the ulnar nerve. Knowledge of the incidence of this anastomosis is necessary because MGA can cause confusion in the assesment of nerve injuries and compressive neuropathies.

Akang E, Oremosu A, Dosumu O, Ejiwunmi A. **Telfairia Occidentalis, a Prophylactic Medicine for Alcohol's Damaging Effect on the Testis.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 380

Telfairia occidentalis demonstrated a prophylactic effect on alcohol induced testicular damage and has improved semen quality. In addition, it also improved serum testosterone and luteinizing hormone levels.

Clinical Science

Ibrahim NA, Popoola AO, Oludara MA, Omodele FO, Fadeyibi IO. **Breast Cancer among Urban Nigerian Women: Appraising Presentation and the Quality of Care.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 388

Late presentation is the hallmark of breast cancer among Nigerians. Awareness of the disease is low and care of this condition has not received adequate attention from Government. Health education to improve awareness was intensified in the last 2 decades. This study aims to assess the current state of care and presentation of breast cancer in Lagos, Nigeria.

Abdic NA, Golubovic Z, Arsic S, Peš ic M. **Fractures of Joint Ankle.**

Maced J Med Sci. 2011 Dec 15; 4(4):..... 393

This analysis had 151 patient who had joint ankle fracture both sexes, age 18-45, and among them there were 102 men (67.55%) and 49 women (32.45%). The patients whose diagnosis was joint ankle fracture were observed in Orthopedic - Casualty ward of Clinical Centre in Podgorica.

The research period was May 2005-May 2009. The results of our research show that the most frequently fractures of joint ankle happened while running 52 patients (34.44%) and the least by fall from the height 22 (14.57%). The most frequent fracture type was SE type 48 (31.79%) and the least PA type 25 (16.56%).

Dhar D. Occult Glove Perforation During Adult Elective Orthopaedic Surgery.

Maced J Med Sci. 2011 Dec 15; 4(4):..... 399

Routine use of double gloves during elective orthopaedic surgery is advocated. Occult perforations are unrecognized during surgery and pose greater risk. Double gloves confers additional protection especially in high risk patients and significantly reduces blood contamination. Also regular glove changing in high risk surgeries and surgeries lasting more than 2 hours is recommended.

Boskabadi H, Maamouri G, Mafinejad S, Rezagholizadeh F. Clinical Course and Prognosis of Hemolytic Jaundice in Neonates in North East of Iran.

Maced J Med Sci. 2011 Dec 15; 4(4):..... 403

Jaundice due to hemolysis is associated with a higher serum bilirubin and more complications like kernicterus. ABO incompatibility was the most common reason of hemolytic jaundice among neonates in north east of Iran. Special attention to ABO incompatibility and G6PD enzyme screening may decrease complications and improve the prognosis.

Case Report

Stojanoski Z. Fatal Sepsis Due to *Stenotrophomonas Maltophilia* in Stem Cell Recipient – Case Report.

Maced J Med Sci. 2011 Dec 15; 4(4):..... 408

Despite use of broad-spectrum antibiotics as prophylaxis, Gram-negative bacteria are still potentially fatal for immunocompromised patients. Microbiological monitoring on local microflora is mandatory for all transplant centers and intensive care units.

Public Health

Chadikovski V, Dimov A, Petrovski M, Simeonov R, Petrovska B. Cadaver Transplantation in Balkans: Mission Possible?

Maced J Med Sci. 2011 Dec 15; 4(4):..... 411

The results revealed that majority of population in Macedonia is familiar with the term transplantation, but there is a very low awareness that a specific law for organ donation exists. Segmentation analysis identified several groups of responders: apostles (23%), mercenaries (11%), escapists (26%), neutral (13%) and hostages (28%). More precisely, apostles are people who perceive transplantation or donations of organ as human act and who already participate in some humanitarian activity like blood donation. The participants were divided upon their opinion

whether they would donate their organs after death. The reasons for this are found in negative attitude towards donation and low level of trust in institutions.

Mijakoski D, Karadzinska-Bislumovska J, Stikova E, Stoleski S. Occupational Sharp Injuries and Biological Markers of Hepatitis B and Hepatitis C Viral Infection in Nurses.

Maced J Med Sci. 2011 Dec 15; 4(4):..... 417

Data showed that needle-stick injuries (81.5%) were significantly more frequent than instrument injuries (61.1%) in examined nurses. Positive Anti-HBc-Ab were more frequently detected in nurses than in subjects from Group II with statistically significant difference (25.9% vs. 6.3%; $P < 0.05$). Positive Anti-HBc-Ab status was registered only among nurses with percutaneous injuries at work.

Stoleski S, Stikova E, Karadzinska-Bislumovska J, Mijakoski D. Biological Monitoring Among Workers Exposed to Inorganic Lead and Its Compounds.

Maced J Med Sci. 2011 Dec 15; 4(4):..... 428

Authors performed cross-sectional study using 60 workers occupationally exposed to lead compared with 60 controls. All examinees were assessed by Questionnaire, and laboratory testing concerning blood lead level (BLL), activity of delta-aminolevulinic acid dehydratase (ALAD) in blood, concentration of delta-aminolevulinic acid (ALA) and coproporphyrin in urine, reticulocytes and erythrocytes with basophilic stippling (EBS).

Medical Theses

Macedonian Journal of Medical Sciences. Macedonian Medical Master of Science Theses in Public Health Defended in 2007-2010.

Maced J Med Sci. 2011 Dec 15; 4(4):..... 437

We present English abstracts of MSc theses in Public Health defended in 2007-2010 at the Faculty of Medicine, University "Ss Cyril and Methodius", Skopje, Republic of Macedonia. English summaries are published as they are translated by authors and included in the final version of defended MSc. Macedonian Medical Master of Science (MSc) theses are deposited in the Central Medical Library and National and University Library "St. Kliment Ohridski" in Skopje, Republic of Macedonia. At the Faculty of Medicine in Skopje 26 MSc theses were defended in 2007-2010, 8 MSc are without abstracts (30.8%) and 13 MSc are without Key words (50.0%).

Author Index

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Instructions for Authors

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