International symposium at Faculty of medical sciences

CURRENT ACHIEVEMENTS AND FUTURE PERSPECTIVES IN MEDICAL AND BIOMEDICAL RESEARCH

STIP, 24 NOVEMBER 2015
MULTIMEDIA CENTRE – UGD, STIP

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INTERNATIONAL SYMPOSIUM AT FACULTY OF MEDICAL SCIENCES
“Current achievements and future perspectives in medical and biomedical research”

SCIENTIFIC PROGRAM
November 24, 2015 - Stip

8:30 – 9:00 Registration

9:00 – 9:15 Rector / Vice rector/Dean

SESSION 1
Chair: Prof. Emilija Janevik Ivanovska
Co-chair: Ass. Prof. Elena Drakalska

9:15 – 9:35 Ass. Marija Darkovska Serafimovska
Macedonian agency of drug and medical devices, Director
University Goce Delcev Stip
Republic of Macedonia

Step forward of Macedonian agency for medicines and medical devices, establishment and strategic plan for development

9:35 – 9:55 Assoc. Prof. Zorica Arsovska Sarafinovska
Institute of Public Health of the Republic of Macedonia, Skopje,
University Goce Delcev Stip
Republic of Macedonia

Adherence to Therapy: A Modern Pharmacotherapeutic Approach

9:55 – 10:15 Prof. Biljana Gjorgjeska
University Goce Delcev Stip
Republic of Macedonia

Use of disinfectants and antiseptics in selected health institutions in Republic of Macedonia

10:15 – 10:35 Assoc. Prof. Bistra Angelovska
University Goce Delcev Stip
President of Pharmaceutical Chamber of Macedonia. Republic of Macedonia

Code of Ethics for Pharmacists – Pharmaceutical Chamber of Macedonia

10:40 – 11:10 Coffee break

10:10 – 11:50 Poster presentation
Chair: Prof. Milka Zdravkovska
Co-chair: Ass. Prof. Darinka Gjorgieva Ackova

10:10 – 10:50 Prof. Neven Zarkovic
Rudjer Boskovic Institute, Croatia

4-Hydroxynonenal – major bioactive marker of lipid peroxidation

11:50 – 12:10 Assoc. Prof. Tatjana Ruskovska
University Goce Delcev Stip Republic of Macedonia

Nicotinamide adenine dinucleotide biosynthesis and consumption in dysfunctional white adipocytes

12:10 – 12:30 Prof. Rubin Gulaboski
University Goce Delcev Stip Republic of Macedonia

New insights into the chemistry and functions of Coenzyme Q

12:30 – 12:50 Assoc. Prof. Darko Bosnakovski
University Goce Delcev Stip
Republic of Macedonia

Genetically modified systems to study muscular dystrophies

12:50 – 14:00 Coffee break

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The organizers would like to acknowledge the support given from the University Goce Delcev- Stip and the Pharmaceutical chamber of Macedonia. Gratitude is expressed to Alkaloid AD Skopje and Fitofarm for the financial support.
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Malignant pleural effusions in lung cancer: condition during disease

Marija Karakolevska-Ilova¹, Elena Simeonovska Joveva², Aleksandar Serafimov³, Lidija Petrovska⁴

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²Department of neurology, Clinical Hospital Stip, Faculty of medical sciences, “ASNOM” 5 Stip
³Department of pathology, Clinical Hospital Stip, Faculty of medical sciences, Roza Petrova br 15 1-1/3-1, Kocani
⁴Department of dermatology, Clinical Hospital Stip, Faculty of medical sciences,”Kozjak planina” 2 Stip

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Abstract

Introduction: Malignant pleural effusions are common pathology in clinical practice in patients with malignant disease. Malignant pleural effusion represents 40% of chronic pleural effusion and is the leading cause of recurrent pleural effusion, which has an additional impact on morbidity in patients with malignant disease. Lung cancer is the predominant cause of malignant pleural effusion confirmed by more research series. Primary lung cancer associated with malignant pleural effusion is metastatic disease (7th edition of TNM classification of lung cancer at the American Cancer Committee). Primary lung cancer associated with malignant pleural effusion further increases the morbidity of these patients reducing therapeutic options and affect survival (a median survival of less than 4 months). Pleural metastases originating from bronchogenic origin appear relatively early in the disease unlike other primary visceral tumors and is sufficient reason to determine the incidence of pleural effusions among different histological types of primary lung cancer and the condition of the malignant pleural effusion in different histopathological types of lung cancer during the course of disease.

Material and methods: This is a retrospective study. Data from 800 patients (35-75 years old) with primary lung cancer classified according to the recommendations of the WHO were processed over a period of three years from 2010 to 2013 at the Clinic of Oncology and Radiotherapy, Medical Faculty - Skopje. The study included all patients with the presence of malignant pleural effusion associated with primary lung cancer regardless of the time of occurrence of pleural effusion. Data from patients for the purposes of the study were evaluated by the following parameters: Incidence of pleural effusion in evaluated lung cancer patients; Development of pleural effusion in certain histopathological types of lung cancer and Condition of the malignant pleural effusion in different histopathological types of lung cancer during the course of disease.

Results: Research has shown that malignant pleural effusion associated with primary lung cancer appeared in 193 patients/28.1%. The right lung malignant pleural effusion appeared with 54.4% of the total number of pleural effusions, and left with 43.5%, and 10.9% of the difference was statistically significant. The right lung showed no statistically significant trend in the separate histopathological type development pleural effusion, while only adenocarcinoma in the left lung showed a tendency to develop pleural effusion for 20.6% more than squamous cell carcinoma. In the right lung 59% of the effusions persisted, 14.3% withdrew and 6.7% progressed, while 63.1% of the effusions in the left
lung persisted, 16.7% withdrew, 6% progressed during disease. In the right lung there wasn’t difference in the condition of pleural effusion between different histological types, but in the left lung adenocarcinoma effusions withdrew as much as they progressed during the disease (13.6%) and squamous cell carcinoma effusions didn’t progress.

**Discussion:** Pleural effusions in lung cancer are a major problem (appearing in 28%) given that they mostly persist during illness regardless of histological type which increases the problem in the treatment and in survival of those patients.

**Keywords:** lung cancer, malignant pleural effusion.