

group I-photochromogens;  
group II-cotochromogens;  
group III-nonchromogens;  
group IV-rapid growing.

These mycobacteria live in water, air and soil, that's why they can contaminate organisms throughout airflow, via parenteral and enteral way. The diagnosis is not so hard, but in many cases irrelevant because of the possibility of atypical mycobacteria to contaminate containers for sputum collection.

**Aim of the study.** To analyse the actual situation of atypical mycobacteria diagnosis in our country, the diagnostic methods used for confirmation here and abroad.

**Materials and methods.** The diagnosis of nontuberculous mycobacteria is based on 3 criteria:

- 1) Clinical criterion: cough, fever, dyspnea and fatigue;
- 2) Radiologic criterion: persistent nodular infiltration;
- 3) Microbiologic criterion: positive culture and positive microscopic view. Each positive culture is the confirmed via GenoType® Mycobacterium CM test. 201 cases of nontuberculous mycobacteria infections were confirmed in 2015-2017 in Republic of Moldova. All of them were confirmed from sputum.

**Results.** Most of the cases could be found in presenile patients, mostly in women and high incidence of species *m. fortuitum* followed by *m. kansasii* is revealed

**Conclusions.** The only method of diagnosis available at this moment in our country and abroad ,to confirm the atypical mycobacteria infection was GenoType® Mycobacterium CM test. Most of the cases could be found in presenile patients, almost in women. A high incidence of species *m.fortuitum* followed by *m.kansasii* was found in our country which leads to the most common transmission way of non-tuberculous mycobacteria.

**Key-words:** nontuberculous mycobacteria, clinical manifestations, diagnostic criteria

## 259. CONTEMPORARY DIAGNOSIS OF ONCOVIRUSES

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**Introduction.** The topic of this paper is the contemporary diagnosis of the oncoviruses. The general objective of our research is to develop and deepen the concept of oncoviruses. The key concepts we have worked with are the following: malignant transformations, skin tumors, DNA genome, Epstein-Barr virus, Bor C hepatitis virus, human papilloma virus, cervical cancer, Papanicola test and HPV test.

**Aim of the study.** Identification and analysis of infectious origin of oncoviruses, contemporary diagnosis of oncoviruses, and especially HPV has been investigated. This review summarizes the molecular testing methods currently used for the detection and genotyping of HPV DNA and discusses future potential approaches.

**Materials and methods.** Investigational protocol included: General Blood Test and Biochemical test, Antigen Antibody Test for Epstein-Barr Virus, Abdominal Ecography, CT with Contrast Substances, MRI, Babes Papanicolau Test, HPV Test, Colposcopy, Cervical Biopsy.

**Results.** The results of the study indicate a modern approach with the inclusion of a new research vision in the field of oncoviruses and the determination of a correct diagnosis.

**Conclusions.** Finally, in our opinion, much more information is needed on the prevalence of globally high-risk oncogenic serotypes, information needed both to implement a screening program that includes diagnostic tests for the most prevalent serotypes, as well as for the

establishment of a vaccination program. Further research is also needed to generate data on long-term clinical effectiveness and duration of protection, following 2 and 3-dose regimens.

**Key words:** diagnosis, HPV, oncovirus, colposcopy, oncogene

## DEPARTMENT OF BIOCHEMISTRY AND CLINICAL BIOCHEMISTRY

### 260. INTOXICATION SYNDROME INDUCED BY TRAUMATIC HAEMOPERITONEUM DURING NONOPERATIVE MANAGEMENT

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**Introduction.** Trauma remains one of the medical and social problems with a major impact on the health of the population, especially affecting young people. Thus, 1.24 million people die annually only in road accidents according to the WHO data.

**Aim of the study.** To study intoxication syndrome in trauma patients with haemoperitoneum during nonoperative management (NOM) by means of evaluation of: necrotic substances (NS) and substances with average molecular weight (SAMW), advanced oxidation protein products (AOPP), advanced glycation end products (AGE) and total antioxidant activity (TAA).

**Materials and methods.** Prospective study (2011-2016) included 59 trauma patients with traumatic haemoperitoneum. Time frame of evaluation of biochemical parameters: at hospitalization, at 3-rd and at 5-7-th days. All trauma patients were divided in 2 groups considering haemoperitoneum volume at admission. Group I with haemoperitoneum volume up to 500 ml includes 38 patients ( $n^1=38$ ) and group II with haemoperitoneum volume more than 500 ml 21 patients ( $n^2=21$ ).

**Results.** Mean age of the patients was  $37.6\pm 15.2$  years. M/F ratio: 2.7/1. Trauma scores: ISS=22.9; RTS=7.4; TRISS=90.4%. Mean volume values of hemoperitoneum at hospitalization constitutes  $299,74\pm 182,26$  ml in group I and  $788,1\pm 293,22$  ml in group II with values ranging between 0 and 1500 ml. NS mean values in group I:  $1.96\pm 0.91$ ;  $1.80\pm 0.69$ ;  $1.56\pm 0.39$  c.u.; in group II:  $2.74\pm 2.71$ ;  $1.89\pm 0.91$ ;  $1.55\pm 0.34$  c.u. SAMW mean values in group I:  $20.30\pm 8.58$ ;  $18.27\pm 6.04$ ;  $16.00\pm 3.66$  c.u. ( $p<0,05$ ); in group II:  $25.44\pm 21.93$ ;  $18.46\pm 5.84$ ;  $15.96\pm 3.90$  c.u. AOPP mean values in group I:  $37.87\pm 20.43$ ;  $34.75\pm 17.89$ ;  $27.15\pm 13.28$   $\mu\text{mol/L}$ ; in group II:  $32.14\pm 18.61$ ;  $28.06\pm 17.33$ ;  $24.19\pm 19.52$   $\mu\text{mol/L}$ . Mean values of AGE in group I:  $503.36\pm 176.30$ ;  $476.88\pm 179.10$ ;  $457.95\pm 164.69$   $\text{mmol/L}$ ; in group II:  $522.67\pm 170.96$ ;  $542.33\pm 186.09$ ;  $476.66\pm 155.48$   $\text{mmol/L}$ . TAA mean values in group I:  $0.33\pm 0.06$ ;  $0.33\pm 0.09$ ;  $0.31\pm 0.05$   $\text{mmol/L}$ ; in group II:  $0.35\pm 0.07$ ;  $0.33\pm 0.05$ ;  $0.31\pm 0.06$   $\text{mmol/L}$ .

**Conclusions.** Intoxication indicators (NS, SAMW) in trauma patients with haemoperitoneum during NOM did not exceed normal range values and did not show any significant differences between group I and II. That can be appreciated as lack of intoxication syndrome in patients with traumatic haemoperitoneum during NOM. SAMW in group II showed statistically significant decrease in dynamic, but the values still not exceeded normal ones. Mean values of AOPP, AGE and TAA did not exceed the values of the normal ranges and, generally, did not show significant differences between both groups or in dynamics, suggesting that antioxidant body system is not affected during haemoperitoneum absorption process.

**Key words:** haemoperitoneum, nonoperative management, toxicity

### 261. NITRIC OXIDE: THE SYNTHESIS AND EFFECTS AT THE LEVEL OF RETINA