



Macedonian
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BOOK OF ABSTRACTS

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...WARDS UROPATHOGENIC
... SIGNIFICANCE

... of medicine: **Microbiology**

... of severe urinary tract
... detected worldwide, and
... The aim is to compare
... isolated E. Coli, regarding the
... the MIC values with the

... strains of E. Coli from 128
... (patients) were analyzed using:
... (total of 1176 tubes),
... as macrocolonies), E-test
... (2 cards per strain).

... working time of the staff
... methods were estimated
... time; 9€ and 10 minutes /
... (respectively). Susceptible were
... as 0.73%, 2.92%, 6.57%,

... diffusion methods, as well as
... at university clinics, are
... marks the necessity of

RELATIONSHIPS AMONG BIOCHEMICAL MARKERS IN EARLY NEONATAL INFECTIONS
(oral presentation)

Author(s): Aleksandra Stamenova, Maja Antevska, Bogdan Kovacev, Martina Ambardzieva
Mentor(s): Prof. D-r. Elizabeta Zisovska
Country: Republic of Macedonia
University: Ss. Cyril and Methodius University of Skopje
Faculty: Faculty of medicine

Field of medicine: Clinical Biochemistry

Introduction: Many infection markers are components of the inflammatory cascade and reflect the host's immunological status and response to infection. The use of biochemical markers in neonatal infection has remained an important area of research in the past decades. The aims of this small prospective study were:

- To present the blood biochemical findings in newborns experiencing clinical features of early onset infections.

-To analyze statistically the two relevant parameters (percent of Granulocytes and CRP). These markers are widely used in the diagnosis neonatal infection and inflammation.

Material and method: Data was retrieved from the neonatal histories from newborns that were born at the University Clinic for Gynecology and Obstetrics in Skopje. During the period from November 18th 2013 until April 15th 2014, data from 122 newborns was collected. Inclusion criteria for data collection included: Blood analysis of the specific parameters for infection-percent of Granulocytes (as a marker of bacterial infection), CRP (as a marker for inflammation and/or infection) and 100 newborns without clinical manifestations of infection and with normal values of CRP/Granulocytes. The clinical picture of visible infection was considered "Gold standard". Positive predictive value and negative predictive value were calculated.

Results: Out of 122 newborns studied, 13.11% (16) presented with clinical manifestations of infection. Out of these 16 newborns 75% (12) had increased level of CRP and 43.75% (7) of them had percent of Granulocytes>70%. For increased Granulocytes PPV=0,148; NPV= 0,92 and for increased of CRP PPV=0,25; NPV=0.94.

Conclusion: High NPV suggest: normal value of Granulocytes/CRP has low level of likelihood of clinical manifestation. The low PPV suggest that positive values of Granulocytes/CRP have low level of likelihood of infection in newborns. In case there is not clear clinical manifestation other method should be considered.

Key words:
CRP, Granulocytes, newborns