

Міністерство освіти та науки, молоді та спорту України  
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# АКТУАЛЬНІ ПИТАННЯ ТЕОРЕТИЧНОЇ ТА ПРАКТИЧНОЇ МЕДИЦИНИ

Topical Issues of Clinical and Theoretical  
Medicine

**Збірник тез доповідей**  
III Міжнародної науково-практичної конференції  
Студентів та молодих вчених  
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resolves by 3-4 months of age, generally supportive care; drug-induced neutropenia: normal bone marrow reserve, but has been associated with a late maturational arrest, antibody or complement mediated neutrophil destruction, treatment consists of stopping unnecessary medications; infection related neutropenia: normal bone marrow reserve, virus induced anti-neutrophil antibody; parvovirus B19 and HIV can be screened, no treatment generally necessary; hypersplenism: normal bone marrow reserve, sequestration/possible destruction of neutrophils in the spleen, associated with malaria, TB, neoplasm, collagen-vascular diseases, hemolytic anemia, spherocytes and tailed RBC on blood smear, treat underlying disorder; pseudo-neutropenia (severe infection): normal bone marrow reserve; generally associated with increases in marginated and tissue pools, mild and spontaneously resolves; Shwachman-Diamond Syndrome: primary decrease in bone marrow reserve, AR, S, extremely rare, steatorrhea from exocrine pancreatic deficiency, metaphyseal dysplasia, 50% survival; 1/3 progress to myelodysplastic syndrome or acute myeloid leukemia, normal sweat chloride; chemotherapy: direct toxicity to neutrophil precursors results in a severe reduction in bone marrow reserve (severity dependent on the intensity of chemotherapy agents used), generally a high risk of infection with poor marrow reserve and generalized suppression of the immune system.

### **CONTENT OF COBALT IN BIOLOGICAL FLUIDS OF FULL-TERM NEWBORNS AS THE PREDICTOR OF PERINATAL HYPOXIC DAMAGE OF CNS**

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Influence of Co content on the system mother-placenta-fetus-newborn children born with hypoxia. Determination of microelement (ME) performed in serum and erythrocytes 30 pregnant women and their infants who have suffered asphyxia at birth. Comparison group consisted of 30 healthy women and their 30 healthy full-term infants. The content of trace elements in biomaterials newborns and their mothers was determined by atomic absorption spectrophotometry mass spectrophotometer C-115M1, manufacturing NPO "Selmi" (Ukraine).

In the placenta of women who gave birth to children with hypoxia observed deficit Co, which creates conditions for faster penetration him to the fetus, but at the same time accumulation feature is suppressed. Serum and red blood cells of pregnant women who gave birth to children with CNS observed a significant lack of cobalt. We also investigated the features of ME content in serum and erythrocytes and especially their renal excretion in term neonates who underwent perinatal hypoxic of the CNS. These children in neonatal there a significant imbalance of serum and erythrocyte content Co. One of the factors of this imbalance ME if perinatal hypoxic of the CNS in term infants is inhibition of excretion of ME. It is proved that an imbalance of serum and erythrocyte Co content in the body of the fetus and newborn, resulting in reduction of Co pregnant women and dysfunction placental hypoxia. Predictors properties of Co detected in serum  $\geq 3,01$  mmol/l in erythrocytes  $\geq 0,61$  mg / mg ash and urine  $\leq 0,40$  mmol / l, respectively. Prognostic significance (index of informing and prognostic factor) was high.

### **THE VIOLATIONS OF NEURO-MENTAL DEVELOPMENT OF CHILDREN WHO HAVE SUFFERED FROM PERINATAL HYPOXIC DAMAGE OF CENTRAL NERVOUS SYSTEM**

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The problem of children adaptation who suffered from perinatal hypoxic damage (PHD) of the central nervous system (CNS) is very important. The brain damage on the early stages of ontogeny violates deterministic evolutionary scenario of pre-, intra- and postnatal adaptation, slows ripening of parameters of functional CNS, which increase the likelihood of developing of secondary cerebral defects. The effects of PHD of CNS reflect not only the severity of injuries, but the effectiveness of