



In 94,7 % of children with combined pathology of the gastrointestinal tract and thyroid gland was diagnosed endemic goiter of the I grade and in 5,3% – endemic goiter of the II grade. Evaluating the functional state of the thyroid gland by the level of thyroid hormones any deviations from the reference indicators were not detected.

Thus, children with combined pathology of the gastrointestinal tract and thyroid gland had a functional origin of disorders on the background of not changed thyroid function. Detection of the root cause of the comorbid gastro-thyroid pathology will contribute developing of personalized examination and following treatment approaches among the pediatric population, especially in endemic regions.

Koliubakina L.V.

**FEATURES OF THE CONTENT OF SEROLOGIC MARKERS OF NEONATAL SEPSIS
IN CONDITIONS OF CHRONIC CONTACT WITH SMALL DOSES OF COMPOSITION
OF HEAVY METALS**

*Department of Pediatrics and Children's Infectious Diseases
Higher state educational institution of Ukraine
"Bukovinsky State Medical University"*

To individualize diagnostic approaches in neonatal sepsis, to investigate the features of the content of its serologic markers in newborns from childbirth, who are in chronic contact with small doses of heavy metal salts that pollute the soil in the habitats.

To achieve the goal, using the simple random sample method, 260 neonates were thoroughly examined, which, in the conditions of the neonatal offices of the CMU "Regional Children's Clinical Hospital" of Chernivtsi and the Khmelnytsky regional perinatal center, according to the current recommendations, diagnosed neonatal sepsis, due to which they received treatment during 2014 -2018 years. The unfavorable influence of environmental factors on the body of pregnant women and their newborns, patients with sepsis, were studied taking into account the geochemical nature joints include family residence, based on official reports relevant services Chernivtsi and Khmelnytsky regions. In the complex of a comprehensive examination of patients, informed consent of the parents of the child, studied the serum content of interleukins-6, -8, -10, procalcitonin, C-reactive protein and presepsin. The obtained results were analyzed using STATISTICA computer software packages StatSoft Inc. and Excel XP. At the same time, they investigated the risk of implementing the attributive and relative risk events, as well as the odds ratio, while the diagnostic value of clinical and paraclinical tests was assessed from the standpoint of their specificity and sensitivity.

Newborns who have signs of neonatal sepsis and were born from mothers in chronic contact with low doses of heavy metal salts are significantly worse by anthropometric and Apgar assessment at 5 minutes, and in their mothers who are probably older than their age in each the second case (48,9%) occurs premature rupture of the membranes ($P < 0,05$). Specific markers of environmental disadvantage of the environment in which mothers of patients with neonatal sepsis of children are, the content of interleukin-6 is greater than 40,0 pg/ml (specificity – 83,88%). The concentration of procalcitonin in the blood serum of premature babies with neonatal sepsis who did not exceed or equal to 0,1 ng / ml is highly susceptible (90,9% sensitivity) to the biomarker of the ecological well-being of their mothers' habitat.

Thus, the risk of unfavorable geochemical characteristics of the place of residence is increased during the next thresholds of serological markers of neonatal sepsis in their newborn babies: the content of procalcitonin is greater than 0,2 ng/ml in 6 times (95% CI 2,8-12,9); for the content of C-reactive protein less than 1,0 mg/l in 6,5 times (95% CI 2,7-15,6); Presepsin content over 5000 ng/ml in 272,2 times (95% CI 32,7-226,8).