При патологоанатомическом исследовании биоптатов: печень – дискомплексация балочной структуры печени, гепатоциты в состоянии крупнокапельной жировой дистрофии с разрывом цитолеммы и цитолизом. Почки – в части эпителиоцитов канальцев жировая дистофия – интрацеллюлярно внутри цитоплазмы жировые вакуоли. Головной мозг - явления выраженного периваскулярного, перицелюллярного и перинуклеарного отека. Заключение: особенность данного клинического случая заключается в сочетании подкорково-мозжечковой дегенерации на фоне нарушения обмена жирных кислот с дальнейшим развитием Рейе-подобного синдрома.

EFFECTS OF EXPERIMENTAL HYPOXIA ON ZINC BALANCE IN THE BRAIN TISSUE OF RATS

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Micronutrient disbalance is one of the mechanisms of damage of membranes. The role of microelements and especially ultramicroelements in metabolic adaptation of newborns on the background of hypoxia is staying unknown.

Research purpose: to research zinc cerebral tissue supply in case of experimental hypoxia with different degrees of complexity.

Microelement supply for zinc was studied as well as the lead level of cerebral tissue in experimental hypoxia conditions. Microelement supply was investigated on 44 laboratory rodents on their first and seventh days.

Zinc content on the first day of live is 158,54±0,66 mkg/g, but in the end of first week it is 109,07±0,92 mkg/g.

The weak and mild-powerful interactions were distinguished between element content in brain and liver (r= -o,23), heart (r=0,37) and kidneys (r=0,21). In a week these interactions were fainted away and it might indicate zinc content elaboration in organs.

The light hypoxia affect caused zinc content reducing in newborn brains in 16,43% ($p \leq 0,05$). The seven-days old animals had its lowing for more 16,43% ($p \leq 0,05$).

The complicated hypoxia level extended changes in elementary compound mostly in newborn animals. In comparison to the light hypoxia affect zinc content in cerebral tissues was reducing in 43,71% ($p \leq 0,05$) the first day, and at the same time the seven-day old animals had its reducing in 3,89% ($p \leq 0,05$).

When newborn rats had hypoxia effect, it was noticed that converse correlation between brain and kidney zinc content was formed (r= -0,62) and heart (r= -0,41). In case of complicated hypoxia the positive mild-powerful correlation occurred between cerebral and heart tissues' zinc content (r=0,54).

That's why, hypoxia affect causes the new element content correlation formations in brain and as well as in other organs, this happens due to tissue excitability changes of pathological factor influence during the neonatal period.

By means of two-factor analysis of variance it is pointed out that hypoxia stage has a minimal influence on cerebral tissue zinc content (12,1%). The age factor efficiency is 69,8%. Otherwise, monitored factor combination has a lower effect just 17,4%.

THE USE OF HYPOALLERGENIC MIXTURES IN CHILDREN WITH SIGNS OF ATOPY

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Question feeding children with clinical manifestations of atopy at impossibility of breastfeeding from a scientific point of view remains controversial. Evaluate the clinical

effectiveness of a hypoallergenic diet therapy (HD) products based on the full or partial hydrolysis of serum protein in cow's milk (CMP) in infants with symptoms of atopic dermatitis (AD).

Integrated dynamic, within 2 months of observation conducted in 31 infant child that was bottle-fed, had clinical signs of atopic dermatitis. With the use of tables of random numbers were distributed on two clinical comparison group. The first (I) clinical group entered 21patient, which was designed soft hypoallergenic diet therapy blends "HiPP HA_1 combiotik" and "HiPP HA_2 combiotik" (according to age and severity of manifestations of AD). To the second group (group) included 10 infants who were administered hypoallergenic mix of other manufacturers (optional mother).

Duration of observation was 2 months. On the main clinical characteristics were comparable groups. Following the correction of malnutrition among children in group I mean score on the EASI scale decreased by 2,2 times (from 12,6±2,6 to 5,7±0,9 points (P<0,05)), where as in infants group II - is only 1,6 times (from 3,8±1,1 to 2,3±0,6 score (P<0,05)). In the beginning of the observation points indicated amount was recorded in 85,7% of children in I group and after - only 57,1 % of patients (Pφ<0,05). In II group, the proportion of such patients decreased from 20,0 % to 10,0 % of children (Pφ>0,05). As a result of consistent HD children showed decrease in symptom severity AD 57,1±10,8% of cases, where as patients II group - only 10,0±9,4% of observations (P<0,05). The relative risk reduction EASI score on a scale of 4,4 points or higher in patients of group versus control was 47,1% absolute risk reduction – 52,3% with a minimum number of patients to be treat to obtain one positive result - 2.

Thus the product "HiPP HA1 combiotic» recommended as a starting formula feeding for children allergic to cow's milk proteins are easy and moderate to anyone under 1 year of age, starting of the first days of life, and for the necessary term to stabilize the clinical effect and subsiding manifestations of atopic dermatitis.

MICROBIOLOGICAL RESEARCH IN NEONATAL ICU (SUMY REGION CHILDREN'S CLINICAL HOSPITAL)

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Newborns with very low and extremely low body weight at birth (VLBW and ELBW) are the most complicated category of patients in a Department of resuscitation and intensive therapy of newborns (ICU).

Objective: to determine of colonization by opportunistic microorganisms and fungi, as well as their sensitivity in newborns in ICU.

Results. In 60%, samples of the cultures material were positive (+). Coagulase-Negative St. (CoNS) (48/100 +); with mucous membranes of neonates most often stood. 58% of CoNS isolates methicillin-resistant were, respectively. Representatives of the Enterobacteriaceae were inoculated with a frequency of 16/100 +: a total of 268 isolates, 15% was resistant to Cephalosporin I–IV generation, and 0.7 % r to Carbapenem. The trend of decrease in the isolation rate of non-fermentative gram-negative rods up to 2.5/100 + noted. They were represented only by two species of Pseudomonas aeruginosa and Acinetobacter spp. and had a wide spectrum of antimicrobial sensitivity. 618 samples of blood cultures from 453 children were studied, of whom 6% +. Fungi represented by 3 genera: Candida, Malassezia and Saccoharomyces. The most frequently inoculated Candida – 1.4% and Malassezia –1%. 70% from fungi - Candida albicans sensitive to fluconazole.

Conclusion. 1. Microbiological monitoring enables to monitor the stages and features of the CPM colonization of the newborns in the hospital. Individual approaches to each patient undergoing treatment in ICU, conducting flexible antibioticotherapia reduce the use of antimicrobials reserve and to reduce the frequency of colonization in children fungal flora.

2. On the background of reducing the frequency of use of antibiotics of a reserve in dynamics is clearly a trend towards reducing the frequency of colonization of newborns no