



neurological diseases were enrolled. In 121 patients vomiting syndrome was observed. For clinical evaluation of regurgitation intensity, the ESPGHAN scale was used. For aggregate characteristic, frequency and volume of regurgitation degree of clinical severity in 3 - 5 points according the ESPGHAN scale were found in 58 children.

Treatment of regurgitation was conducted in stages, according to the guidelines of ESPGHAN: 1. Psychological support of parents; 2. Educational work with parents; 3. Positional progressive therapy; 4. Diet for breastfeeding mothers; 5. Diet for a child; 6. Medical therapy; 7. Surgical treatment.

As a therapeutic feeding, antireflux mixtures were prescribed in the two groups. In the group of 21 infants - mixtures, with a modified starch as a based thickener was used. In the second group of 37 patients - a mixture based on cellulose gum carob beans (powder Humana AR) was prescribed.

It was figured out, that in the second group of children more pronounced clinical benefit in a shorter period (5 days) was observed and compared with the group. Along, stool normalization was observed in children prone to constipation. In the group of patients treated with the mixture of the thickener which included starch, the antireflux action is manifested at a later time (8-10 days from the beginning of the correction food). It can be explained by the peculiarity of starch to starts hydrolyzing already in the mouth, stomach and intestine, which reduces its property as a thickener. In both groups, a regression of the main clinical manifestations: reducing vomiting and stool normalization and positive dynamics of body weight was observed.

Thus, our investigation gives grounds to recommend the use of antireflux mixture (Humana AR) for children in the first year of life with intensive regurgitation (3-5 points), with a tendency to constipation, as a basic nutrition.

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### **THE BACKGROUND CONDITIONS AND RESPIRATORY PATHOLOGY IN AN EARLY AGE**

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Nowadays background conditions in infants play a significant role in the genesis of acute respiratory diseases. An important factor for the severe course of infectious respiratory diseases in children is rickets. The urgency of phosphorus-calcium exchange disorder is substantial because rickets occupies a special place in the structure of background diseases. According to the Ministry of Health of Ukraine, the incidence of rickets in the population of children under 1 year in various regions of Ukraine is from 54 to 66% of term infants and 80% of premature babies.

During 2016, in the pediatric department of Chernivtsi city clinical children's hospital, 354 children of the first year with acute respiratory infections were treated. The 191 patients (53.9%) were under 6-month-old and formed the first group, 163 children (46.1%) in the age between 6 months and 1 year formed the second group. In 225 (63.6%) children signs of rickets of the first and second degree were observed.

It is a well-known fact that the light and subacute forms prevail in the clinical picture of rickets in children, which creates difficulties in diagnosis. Therefore, to verify the diagnosis of rickets in all cases the laboratory studies of calcium and phosphorus in the blood, the level of alkaline phosphatase, levels of phosphaturia and aminoaciduria and ultrasound investigation of the distal portion of the radius was conducted. Children receiving vitamin D underwent the Sulkovych test. The study of social and domestic factors in the development of rickets occurred by questioning the parents.

In the first group of patients the rickets of I degree was found in 98 infants (51.3%), II degree - in 23 children (12.1%). In children, of the second group the clinical and laboratory signs of rickets dominated of II degree in 74 cases (45.4%), while the I degree of rickets was diagnosed in 30 children (18.4%).

Investigating the factors that contributed to the development of rickets in infants, we analyzed the cards of antenatal history, feeding and daily routine of the child and mother, social conditions for living, parents performance of specific and unspecific methods of prevention of rickets. Prenatal factors that contributed to the development of rickets was found in 161 (71.5%) out of 225 patients. The breastfeeding only was observed in 63 children (28.0%), 23 children were on mixed feeding (10.2%), 139 patients were on artificial feeding (61.8%). Improper diet and violations of the day of nursing mothers were found in 89.0%, unsatisfactory social conditions of the family residence were declared in the questionnaire in 22.0% of respondents. A careful execution of nonspecific methods of prevention of rickets by parents was observed only in 18.0% of cases. Out of 225 children with rickets, only 22 received the therapeutic dose of vitamin D3. The prophylactic dosage of the one in 116 cases was mostly used sporadically, haphazardly, without proper control of general practitioner. The Sulkovych test proved to be positive in 32 patients with clinical manifestations of hypervitaminosis of Vit.D.

The obtained data demonstrate the lack of an adequate level of the early prevention of rickets both by health workers and parents. International experience of pediatricians indicates the priority of nonspecific prevention of rickets. An adequate child care, respect for the day, sufficient exposure to air, the physical activity of the child, preservation, and stimulation of lactation makes the prevention of rickets possible. The uncontrolled use of vitamin D causes its hypervitaminosis and violation of phosphorus-calcium metabolism in infants.

The actions for an early prevention should be carried out in each family based on individual risk factors for rickets.