



second (II) group of comparison included 6 children with a moderate risk of respiratory remodeling ( $VEGF \geq 80$  ng/ml,  $MMP-9 \leq 5,2$  ng/ml or  $VEGF \leq 80$  ng/ml,  $MMP-9 \geq 5,2$  ng/ml), and the third one (III) – 3 patients with a low level of  $VEGF (\leq 80$  ng/ml) and  $MMP-9 (\leq 5,2$  ng/ml) and with a low risk of bronchial remodeling respectively. The clinical groups of comparison did not differ reliably by the main characteristics.

The frequency of indication of disobstructive medicines and the volume of the performed treatment of asthma attacks in children with bronchial instability less than 13% was not found to differ much: the patients of the I group received monotherapy with  $\beta_2$ -agonists and a comprehensive therapy with  $\beta_2$ -agonists and glucocorticoids more frequently, and the II and III groups received a comprehensive therapy with  $\beta_2$ -agonists and glucocorticoids as well as their combination with anticholinergic drugs. It should be noted that the treatment performed for the patients with a low bronchial instability was less effective in children with a high risk of bronchial remodeling. Thus, maintenance frequency of pronounced bronchial obstruction (more than 9 points) on the third day of treatment was found in the I group of patients in 71,4% cases, in the II group – in 50% and in the patients from the III group – in 33% of observation. In this respect bronchial disobstruction on the 3<sup>rd</sup> day of treatment was more pronounced in children with a high risk of remodeling. Thus, bronchial disobstruction on the 3<sup>rd</sup> day of treatment less than 3 points was found in the I group in 14,3% cases, in the II group – in 50% and in the III group – in 66,7% of observations ( $p$  I:III  $< 0,05$ ). The ratio of chance retention of bronchial obstruction clinical signs (more than 9 points) and their weak disobstruction (less than 3 points) in the I group of children concerning the III group were found to be 5,0 (95% RI: 2,74-9,12). While comparing the efficacy of treatment these indices in patients from the II group concerning the children from the III group were 2,0 (95% RI: 1,13-3,55).

Therefore, in children with a high probability of bronchial remodeling and a low level of their instability concerning the patients with a low risk of respiratory remodeling disobstructive therapy is accompanied by a high risk of maintenance of pronounced obstruction of the low respiratory tract with a higher level of their disobstruction.

**Bodnar O.B., Bodnar B.M.**

#### **DIAGNOSTICS AND SURGICAL TREATMENT OF CHRONIC CONSTIPATIONS OF CHILDREN WITH DOLICHOSIGMOID**

*Department of Pediatric Surgery and Otolaryngology  
Higher State Educational Establishment of Ukraine  
«Bukovinian State Medical University»*

At the present stage of development of the abdominal pediatric surgery the absolute indices for surgical treatment concerning dolichosigmoid are not worked out. Unsatisfied results and relapses of the disease range from 27.3% to 45.9%.

Objective of the study: to improve the methods of surgical treatment of chronic constipations in children with dolichosigmoid.

During the period from 2003 to 2013, 344 children aged from 6 months to 17 years with chronic constipations were examined at the Pediatric Surgical Clinic. Colonoscopy, irrigoscopy and irrigography examinations were made compulsory with barium mixture.

180 children were diagnosed to have dolichosigmoid. 29 children ( 16.11%), from 6 to 17 years, were operated on. According to X-ray examination it was found that 14 patients operated on dolichosigmoid had a high position of the colon left bend. In assessing the X-ray examinations and clinical symptomatology two groups of patients were singled out: 1 - isolated dolichosigmoid (15 children), 2 - dolichosigmoid combined with the colon left bend high position (14 children). During surgical treatment, children were divided into two groups: 1- resection of the sigmoid colon with dolichosigmoid by a traditional method; 2 - resection of the sigmoid colon with the formation of the upper sigmoid ligament based on our own methodology.

After resection of the sigmoid colon by a traditional method, periodical constipations after surgery was found in 18.75% of patients, abdominal pains - 37.5%, excrement smearing - 60%. In addition to operations with forming of the upper sigmoid ligament - constipations were absent; abdominal pains remained within 14.29 % of patients, excrement smearing - 16.67% as compared to the preoperative clinical manifestations.

48.28% of children operated on dolichosigmoid, had high position of the colon left bend that required additional dissection of the left phreno-colic ligament. Resection of the sigmoid colon with the formation of the upper sigmoid ligament can be a method of choice for surgical treatment of chronic constipations in children with dolichosigmoid.

**Bogutska N.K.**

#### **COMPARATIVE ANALYSIS OF THE ATOPIC COMPONENT OF DIFFERENT PHENOTYPES OF BRONCHIAL ASTHMA IN SCHOOL AGE CHILDREN**

**(results of cluster analysis)**

*Department of Pediatrics and Children Infectious Diseases  
Higher State Educational Establishment of Ukraine  
"Bukovinian State Medical University"*

The incidence of atopic bronchial asthma (BA) in children varies from 40% to 80% in the prevalence of this disease and depends on the conditions of performing the study. Well known association between BA and atopy was revealed long ago, but the exact mechanisms of this association are not fully defined.