



мікроорганізми за участі протеаз та уреаз розщеплюють харчовий білок до токсичних амінів, фенолів, індолів, аміаку і інших продуктів, які всмоктуються та метаболізуються в печінці, перетворюючись в нетоксичні з'єднання (наприклад, сечовину). Клінічно бродильні і гнилісні ефекти проявляються метеоризмом, здуттям, вурчанням в животі і спастичними болями в дистальному відділі товстої кишки. Згідно «Концепції функціонального харчування» існує два чітких науково обґрунтованих напрямки у боротьбі з дисбіозами: спосіб оральної колонізації кишечника шляхом активного заселення живими (чи сухими ліофілізованими) корисними для людини бактеріями та використання пребіотиків.

Корекцію дисбіозу кишечника у немовлят можливо проводити із застосуванням біологічно активних речовин: функціональне харчування, пробіотики, пребіотики, синбіотики, бактеріофаги. Симптоматично під час лікування для зняття клінічних проявів дисбіозу у дітей рекомендовано застосування рослинних препаратів, наприклад комбінованого рослинного препарату зі спиртових екстрактів на основі витяжки одної свіжої рослини (*iberis amara* - іберійка гірка) та восьми висушених лікарських рослин. Застосовується тричі на день перед чи під час їди з невеликою кількістю рідини (дозування залежить від віку). При використанні виражений позитивний ефект цього фіто-фармацевтичного препарату: специфічна місцева дія на моторику шлунку, позитивний вплив на тонус м'язів кишечника, модулююча дія на повільні хвилі здухвинної кишки, знижує гіперчутливість до подразників з верхнього відділу ШКТ, взаємодія з серотоніновими рецепторами ШКТ, захисна дія на слизову оболонку і вплив на вироблення кислоти в шлунку, дія на секрецію хлоридів в кишечнику, протизапальна та антиоксидантна дія, вітрогінна дія, антибактеріальна дія на *Helicobacter pylori*, швидка резорбція активних речовин.

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PECULIARITIES OF PERIOD AFTER USAGE KETAMIN ANESTHESIA IN CHILDREN

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General anesthesia – a time limited medical effects on the body, in which the patient is unconscious when is entering painkillers, followed by reduction of consciousness without pain in surgery. Anesthesia – unpleasant page in the life of some people. Adult patients wake up after anesthesia in different ways: some easy, some not. But adults are aware of their situation and can more or less adequately assess the situation, in which there are. In children, in addition to the severity of the medical condition, feeling pain, there is still not clear to them a sense of confusion.

Therefore, the aim of our study was to define the peculiarities of period after anesthesia in children after using ketamine and improve its course.

Under the supervision were 30 children aged 8 to 15 years who used intravenous anesthesia with 5% solution of ketamine for small surgeries (catheterization of the central vessels, lumbar, sternal and pleural punctures), treated in the infectious department of anesthesiology and intensive care of regional children's hospital in Chernivtsi. The average duration of anesthesia was 30 minutes. For sedation used 0.1% solution of atropine and 0.5% diazepam solution intravenously in doses of age. During anesthesia defined vital parameters: heart rate, blood oxygen saturation. Oxygen therapy was provided through the front moist oxygen mask.

Depending on transaction of period after usage ketamin anesthesia, children were divided into 2 groups: the first group (15 children) – used standard infusion solutions (0,9% sodium chloride solution, 5% glucose), the second group (15 children) – was used Latren as basic solution in infusion at a dose of 10 ml / kg.

The average duration of period after usage ketamin anesthesia in children of I group was $28,3 \pm 2,5$ minutes, and in the children of II group – $19,2 \pm 1,5$ minutes ($p < 0,05$). Also, in 27% of cases in children of II was observed less symptoms such as reduced oxygen saturation in the blood. The average oxygen saturation in children of I group was $84,4 \pm 4,1\%$, and in the second group of children – $93,3 \pm 2,2\%$, $p < 0,05$. Also in the second group of children were missing effects such as dizziness, bronchospasm, cardiac depression. In general, children of the second group noted the softer course of period after usage ketamin anesthesia and reduce postoperative pain. Patients in the first group had administered analgesics for pain purchase more often (54%).

Thus, the usage of Latren in period after usage ketamin anesthesia allows significantly reduce its duration (32%) and to prevent adverse effects of this period, contributing to a faster recovery and faster transfer in somatic hospitals.

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EFFICACY OF DISOBSTRUCTIVE THERAPY IN CASE OF BRONCHIAL ASTHMA WITH A HIGH RISK OF BRONCHIAL REMODELING DEVELOPMENT

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The objective of the study was to evaluate the efficacy of disobstructive therapy in children suffering from bronchial asthma depending on the risk of bronchial remodeling development.

16 schoolchildren suffering from bronchial asthma with bronchial instability index less than 13% were examined comprehensively at the Regional Pediatric Clinical Hospital in Chernivtsi. The first (I) clinical group included 7 children suffering from bronchial asthma with a high risk of bronchial remodeling ($VEGF \geq 80$ ng/ml, $MMP-9 \geq 5,2$ ng/ml). The



second (II) group of comparison included 6 children with a moderate risk of respiratory remodeling (VEGF ≥ 80 ng/ml, MMP-9 $\leq 5,2$ ng/ml or VEGF ≤ 80 ng/ml, MMP-9 $\geq 5,2$ ng/ml), and the third one (III) – 3 patients with a low level of VEGF (≤ 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 β_2 -agonists and a comprehensive therapy with β_2 -agonists and glucocorticoids more frequently, and the II and III groups received a comprehensive therapy with β_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 3rd day of treatment was more pronounced in children with a high risk of remodeling. Thus, bronchial disobstruction on the 3rd 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.

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DIAGNOSTICS AND SURGICAL TREATMENT OF CHRONIC CONSTIPATIONS OF CHILDREN WITH DOLICHOSIGMOID

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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.

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

(results of cluster analysis)

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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.