

animals there is an increase in DNA content in the nuclei of cells was significantly different from the control group.

Animals 3 groups, which were exposed to carcinogenic factors in the mammary gland structure enhanced leukocyte infiltration due to the combined action of the toxic drug to an animal. Here it may be noted that the effect of a carcinogen can cause changes in the morphology of the cells, increasing its size and contribute to the emergence of atypical properties of the nuclear contents.

Group of animals, the combined Gets carcinogen and hormone qualitatively distinguished from all the groups. Three animals was determined macroscopically tumor in a second pair of breast size up to 1.5 cm thick consistency to the touch, with histologically verified tumor growth in a low-grade ductal carcinoma. The other animals of this group in the mammary gland against cell hyperplasia occurred elements with weakly to moderately severe signs of atypia, isolated tumor cells. High proliferative activity of the cells of the breast explains the high levels of DNA in the nuclei of  $0,3 \pm 0,06$  versus  $0,184 \pm 0,04$  in the control group (at  $p < 0,05$ ). And the high mitotic activity index  $14,46 \pm 2,74$  and  $6,0 \pm 2,1$  in the control group (at  $p < 0,05$ ). The high proliferative activity in conjunction with the general response of the body explains the high rates of leukocyte infiltration of the stroma  $2,8 \pm 1,6$ .

#### **Conclusions:**

The data thus many studies on the proliferative effect of a number of hormones estrogen on the breast with the development of hyperplastic processes in it have been shown in our experiments. Since animals treated with estradiol in pure form in the structure mentioned features hyperplastic mammary cell changes the apparatus, with the increase in cell size, the appearance of increased mitotic activity. At the same time we can not exactly say that a hormonal factor can cause a transition from a normal cell division to neoplasia. Polyetiological breast cancer is a disease that has been proven effect on breast tissue carcinogen against the high content of estradiol. In this group of animals on a background visible cellular atypia in mammary glands, growth revealed 3 episodes poorly differentiated ductal tumors.

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## **The antibiotic associated syndrome at antibacterial therapy gastroenteritis, caused by e.coli, at children**

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**The resume:** the antibiotic associated syndrome (AAS), is symptom-complex collateral displays of ineffective and unreasonable use of antibiotics in complex therapy coli infection, proceeding as alimentary toxicoinfection. Use nifuroxazid in need of carrying out of antibacterial

therapy allows avoiding development of collateral displays reduces time of knocking over of the basic clinical displays of disease and positively affects duration of stay of the sick child in a hospital.

**Keywords:** antibiotic associated syndrome, nifuroxazid, treatment, children.

Throughout the last 10 - 15 years in the world medical literature in increasing frequency are underlined development antibiotic associated diarrheas (AAD) at use of antibiotics in treatment of various diseases (3,8,9). AAD can vary from easy self-correcting diarrheas (2,7) before development pseudomembranous colitis (PMC). Search of antibacterial preparations with mild negative influence on an organism of the patient has crowned success. One of those is nifuroxazid (manufacture Bosnalek, Sarajevo). Nifuroxazid (enterofuril) is the nitrofurane of III generations, antiseptics of local influence, the condition of normal microflora of intestines (1) practically does not break, is used in therapies of intestines dysbacteriosis (6). The given preparation is effective at treatment of patients with various acute intestinal infections (4,5).

**Objective:** to study features of efficiency of various antibacterial preparations in complex therapy kolinflections at children.

#### **Materials and methods**

194 children have entered into working out. All patients were divided by a blind method of continuous sample into 3 groups. At patients of group H (81 path.) basic therapy was combined with Nifuroxazid, in group A (69 path.) with the Antibiotic, and to children from group O (44 path.) The General basic therapy (gastric lavage, deintoxication, regitration, sorbents, enzymes) was spent only. Necessity of appointment of antibacterial therapy it was defined only by the doctor of a reception. At children of early age, more preferably, in the first days of the beginning of therapy by a nifuroxazid a single dose give it is fractional, during 20 - 30 minutes. In single instances, on suspension reception of nifuroxazid, children reacted vomiting. In this connection, we passed on fractional given a single dose of a preparation during 20 - 40 minutes. At repeated vomiting the preparation was cancelled. Efficiency of the appointed therapy was estimated on time of knocking over of the basic clinical displays of disease and on duration of stay of the patient in a hospital. All patients arrived in moderate severity. The disease diagnosis proved to be true activator seeding only from gastric lavage. Disease proceeded as alimentary toxicoinfection in the form of acute gastritis and acute gastroenteritis.

#### **Results and discussion**

Investigated groups of patients were insufficiently equivalent on age, a sex, and receipt time in a hospital, to variants of a clinical current (gastritis, gastroenteritis). Probably it somewhat speaks heterogeneity of representatives of big group Escherichia Coli on intensity and quality of pathogenicity.

The results of research presented in the table, have shown low enough efficiency of antibiotics at treatment of coli infection, proceeding as alimentary toxoinfection. In comparison with indicators of groups to which basic therapy or basic therapy was spent only it was combined with appointment nifuroxazid, this difference in time of knocking over of the basic clinical symptoms of disease has appeared authentic, and was reflected in duration of stay of the patient in a hospital. Patients from group A left a hospital much later ( $6,54 \pm 0,22$  d.) Than in group H ( $5,99 \pm 0,10$  d;  $P < 0,05$ ) and O ( $5,75 \pm 0,14$  d;  $P < 0,01$ ). We have found out, what not at all patients of group A the smooth current of disease was observed. At some patients from this group on 3 - 4 days of stay in a hospital was marked diarrhea occurrence (AAD), or diarrhea increase. At other patients rise in temperature of a body or fever strengthening was observed. At the majority of children took place combined joining or stratification of a diarrhea with a fever which could be accompanied by vomiting renewal, repeated deterioration of appetite, strengthening abdominal pains, intoxication increase. Clinical, laboratory inspection of patients at stratification of the described collateral displays has not given us the bases to suspect joining of complications (?) or stratification of other infection.

The antibiotic associated syndrome described by us earlier (5), more exact name of a complex of collateral displays which can develop at use of antibiotics in treatment of coli infection,

proceeding as alimentary toxoinfection. Clinic ignorance the antibiotic associated syndrome or the incorrect treatment of the collateral displays caused by antibiotics, dictates necessity of transfer of the patient on stronger antibiotic, with consequences following from it.

**The table.** A comparative estimation of duration of symptoms of disease, days (M±m).

| group        | H<br>n =81 | A<br>n=69 | O<br>n=44 |
|--------------|------------|-----------|-----------|
| diarrhea     | 3.01±0.15  | 3.91±0.19 | 2.63±0.22 |
| anorexia     | 2.86±0.13  | 3.14±0.15 | 2.92±0.15 |
| fever        | 2.04±0.11  | 2.93±0.20 | 1.99±0.16 |
| acetonuria   | 3.26±0.22  | 3.88±0.21 | 2.96±0.24 |
| intoxication | 2.80±0.13  | 3.20±0.15 | 3.04±0.17 |

Thus, nifuroxazid carrying out of antibacterial therapy is a highly effective preparation if necessary at gastroenteritis, caused by E. coli. The prescription of antibiotics should be regulated only by strict indications. Development of antibiotic associated syndrome - the indication to antibiotic cancellation. In need of continuation of antibacterial therapy transfer on nifuroxazid is preferable.

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### **Modeling of lipid peroxidation In the conditions of «in situ»**

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**Summary.** The basis of these results we make the assumption that this process can influence the process of lipid peroxidation, in the content of lipid peroxidation products in the liver tissue. The test method promotes activation of peroxidation in the liver, increased levels of lipid