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## DETERMINATION OF PREDISPOSITION TO DISEASES OF THE PERITONEUM AFTER ABDOMINAL SURGERY IN CHILDREN

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**Abstract.** The authors studied one of the pathogenetic factors of adhesive disease in 53 sick children, predisposition to adhesive diseases and measures to prevent premature formation of adhesions. Predisposition to adhesive disease is observed in 50% of patients and is determined by the degree of increase in the concentration of fibrinogen in the blood and a decrease in fibrinolysis. Appropriate mitigation measures were taken and the possibility of early prevention of adhesions was studied.

Keywords: adhesive disease, fibrinolysis, children, laparoscopy, propensity.

Relevance of the problem: despite the modern rise in medical science, the process of postoperative articulation in the abdomen and the disease of the abdominal articulation remain one of the pressing problems of general surgery. The main cause of the development of postoperative adhesions is damage to the mesothelium of the peritoneum. Despite the only scientific publications, which reflect the results of hundreds of experiments and clinical studies devoted to the disease of the transaction, this problem is far from its solution. One of the unresolved problems of modern clinical surgery is the treatment of intestinal obstruction and its prevention. Over the past decade, the number of patients with bithymal intestinal obstruction has increased, being 48-60% (4-5) compared to other intestinal obstruction. It is known that each person differs from each other in terms of his individual anatomical structure and in physiology, psychology and structure of the nervous system. This opinion is confirmed in practices. During 2011-2021, the results of patients undergoing abdominal surgery were analyzed. The conclusions showed that of the 6,506 children (12.0%) whose surgical practices were performed in different diagnoses, 780 were referred with clinical signs of an articular intestinal obstruction. Of these, 1,280 (19.7%) children reported abdominal pain. This information indicates that not all patients experience the same processes of termination. Therefore, 86 parents of children were examined, of which 53 (61.1%) were found to have had abdominal surgery. Of this (with appendectomy-42, 12-with perforation of the intestinal ulcer-5, with gastric resection-3, with damage to the abdominal organs-3). Of these, 17 (32.0%) had bithymal disease and 5 parents had an internship with bithymal bowel obstruction.

**The purpose** of our studies is to study the individual predisposition to diseases of the peritoneum in patients who have undergone abdominal surgery.

**Material and styles** After abdominal surgical procedures, a violation of the tissue fibrinolysis system plays an important role in the pathogenesis of the formation of adhesions in the disease of the peritoneum. (1,2,3).

We aim to study the goals we have - the condition of fibrinolysis, the amount of fibrinogen before surgery, during surgery, within 5 days after surgery. Of the 53 patients, 34 were boys and 19 were girls with ages ranging from 7 to 17 years.

Gender	of	Age of patients				Total
patients		1-3	4-7	8-12	13-17	
Boys		1	9	13	11	34
		1,9%	17%	24,5%	20,8%	64,2%
Girls		1	2	7	9	19
		1,9	3,7%	13,2%	17	35,8%
Total		2	11	20	20	53
		3,6%	20,8%	37,8%	37,8%	100

Distribution of patients by age and gender (n-53)

The first group consisted of 29 children (54.7%) who were informed that surgery was being planned. The second group consisted of 24nafar (45.3%) children with no indication of surgery and was reported to have scheduled examinations. Both groups of children received venous blood after 2 hours to check fibrinogen levels and blood fibrinolytic activity.

**Results and conclusions of the examination:** The first group showed an increase in fibrinogen in 11 of 29 (54.7%) Sick Children (37%), ranging from 394 to 488 mg%, with an average of  $412\pm18.4$  mg%, of which 3nafari (10.3%) showed an increase in fibrinogen from 468mg% to 488 mg%. In the remaining (18) patients, the fibrinogen content was 364 - 400 mg%. But these indicators also showed higher than the norm (on average  $338\pm26$  mg%in the norm). Patients in the second group had 24 individuals (45.2%), two of whom had a 394mg% increase in fibrinogen. And the rest established normative norms. From these results, it can be seen that if the patient knows that a surgical procedure is being planned, the body will prepare for it, in which protective reactions will slowly appear.

Oksner (1930.) in his time, he noted that abdominal surgery would also not have developed if it had not been for the formation of abdominal adhesions after abdominal surgeries. Even at the time of endovideolaparoscopic surgery, the blood was transferred to labarotoria for analysis of coagulological indicators. In this, the increase in fibrinogen levels in all patients varied from 480mg% to 1240mg% and an average of 844± 28mg%, and blood fibrinolytic activity rapidly dropped to 96 to 158mg, (310±8.7 mg % in the norm) averaging 136±7.6 mg%. These indicators suggest that a rapid decrease in blood fibrinolytic activity creates conditions for the conversion of fibrinogen to fibrin, allowing the conversion of fibrin to collagen, which indicates a rapid onset of the cohesive process. In addition, it should be said that in some patients, an increase in the amount of fibrinogen was observed 1.5 times, and in some-up to 3 times. Blood fibrinolytic activity also overlapped with fibrinogen levels.

**These results** showed that fibrinolysis inhibitors were in the norm in some patients, with an increase in fibrinogen levels of 1.5 - 2marotaba and a corresponding increase in blood fibrinolytic activity. Only 17 patients showed an increase in fibrinogen, a sharp decrease in blood fibrinolytic activity, as a result of a lack of inhibitors. This leads from the data to the conclusion that in some patients, an increase in the amount of fibrinogen, a decrease in fibrinolysis, indicates

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a predisposition of the peritoneum to finishing processes. In such patients, timely correction of blood fibrinolytic activity, if possible in the process of surgical procedure, prevents the formation of early abdominal adhesions. For such purposes, a fibrinolytic mixture (heparin 10000 Ed + fibrinolysin 20000 Ed + hydrocortisone 125 mg + gentamicin 80 mg+ novocaine 0.25% -200) was administered through a microirrigator left in the abdomen at the end of the surgical procedure, every 6-8 hours, after 6 hours, venous blood was examined. This found that a decrease in fibrinogen levels was observed, compared to previous analyses (614±14 mg% compared to 844±28 mg% in earlier analyses), while an increase in blood fibrinolytic activity (284±8.4 mg%). But it was found that the amount of fibrinogen was to a certain extent higher as these indicators improved fibrinolysis in comparative comparison with the previous ones. High levels of Fibrinogen were followed by decreased fibrinolysis. From the above, the fibrinolytic mixture was injected into the abdominal cavity more than 2 times a day. At the end of the second day, at the beginning of the third day, there was a gradual decrease in the amount of fibrinogen, these indicators were different in all patients. In 38 of the 53 patients (71.7%), fibrinogen levels were observed to drop to normal, averaging 402±12 mg%, while the remaining 15 (28.3%) maintained a higher fibrinogen content than the norm, averaging 486±16 mg%. This increased blood fibrinolytic activity was found in the first group of patients, 288±18 mg%, and in the second group, 212±14 mg%. Complex treatment with fibrinolytic mixture was continued. After the surgical procedure, the intestinal passageway came to an end, with the improvement of intestinal peristalsis from 2 days in the first group of patients, and from 3 days in the second group of patients. In the case of re-obtained analyses, however, it was observed that fibrinogen levels were moderate, averaging 386±16mg%, while blood fibrinolytic activity also increased, (averaging 302±6.0 mg%). These indicators did not differ from those in the norm. Thus, based on the results obtained, it can be concluded that blood fibrinolytic activity, the amount of fibrinogen, is one of the important zvenos in the pathogenesis of the processes of pubertal adhesions. Depending on the amount and indication of fibrinogen and blood fibrinolytic activity during surgical procedures, it is possible to determine the degree of predisposition for the formation of abdominal adhesions in patients. For the early prevention of peritoneal disease, starting from the time of surgical procedures, in complex treatment, it is advisable to send a fibrinolytic mixture to the abdominal cavity, to the fibrinogen indicator and under the control of blood fibrinolytic activity. Then the balancing of fibrinolysis is observed on 5-6 days. This is important in the early prophylaxis of abdominal adhesions, which leads to a rapid restoration of intestinal motor activity and a sharp decrease in the articular process.

## Conclusion

Thus, fibrinogen concentration and fibrinolytic activity of the blood are important in the pathogenesis of the disease of the joint. During surgical interventions, it is possible to identify patients prone to adhesions, depending on the concentration of fibrinogen and indicators of fibrinolytic activity of the blood. Patients with a Fibrinogen concentration greater than 1 million mg% and a decrease in fibrinolytic activity to 60-80 mg% can be considered susceptible to bitch disease. For early prophylaxis from the moment of surgical intervention in the treatment complex, fibrinolytic mixture should be administered to the abdominal cavity through drainage under the supervision of fibrinogen concentration and fibrinolytic activity of venous blood. With adequate correction of fibrinolysis in 5-6 days, a gradual normalization of these indicators is noted. At the

same time, due to the early prevention of joint disease, a rapid recovery of bowel movements is observed.

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