

TACTICS AND TREATMENT OF BLEEDING OF DILATED VARICOSE VEINS OF THE ESOPHAGUS AND STOMACH IN CHILDREN WITH PORTAL HYPERTENSION

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ABSTRACT

The effectiveness of providing qualified medical care for portal hypertension syndrome and esophagogastric bleeding in children depends on timely diagnosis, timely stopping of bleeding, if necessary, and adequate surgical treatment. However, when hospitalized later than 1-2 days from the onset of the first signs of bleeding, the outcome is largely determined by the methods used to stop bleeding, their pathogenetic correspondence to the patterns of development of liver and multiple organ failure. Treatment of portal hypertension syndrome and bleeding from varicose veins of the esophagus and stomach includes a therapeutic and prophylactic complex of measures: drug therapy, placement of a Blackmore probe, endoscopic ligation and sclerotherapy, and, if absolutely necessary, surgical treatment. Timely diagnosis makes it possible to identify the disease in the compensated and subcompensated stages, which greatly facilitates treatment and reduces mortality.

Keywords: childhood, esophagus, stomach, bleeding, portal hypertension.

INTRODUCTION

According to the World Health Organization, regardless of the causes, portal hypertension syndrome (PH) is one of the serious problems of pediatric surgery. In 80% of cases in children, extrahepatic PH (HEH) occurs due to developmental anomalies or portal vein thrombosis. PGI in children with PH is characterized by a sudden onset, high intensity and low effectiveness of conservative therapy. Treatment of portal hypertension syndrome and bleeding from varicose veins of the esophagus and stomach includes a therapeutic and prophylactic complex of measures: drug therapy, placement of a Blackmore probe, endoscopic ligation and sclerotherapy, and, if absolutely necessary, surgical treatment. Timely diagnosis makes it possible to identify the disease in compensated and subcompensated stages, which greatly facilitates treatment and reduces mortality.

MATERIALS AND METHODS

In the departments of pediatric surgery of the African Research Center for Emergency Medicine and the Andijan Regional Children's Clinical Hospital, from 2001 to 2021, 128 children with cirrhosis were examined and treated.

Gender	0–3 year		3–7 year		7–13 year		13 year and over		All	
	All	КВПИ иЖ	All	КВПИ иЖ	All	КВПИ иЖ	All	КВПИ иЖ	All	КВПИиЖ
Boys	10	6	34	19	11	8	7	4	62	37
Girls	13	9	38	22	13	7	4	3	70	41
General amount	23	15	70	41	24	13	11	7	128	78

The distribution of patients by gender and age is presented in the table high-quality endoscopic sclerotherapy. Sometimes, during endoscopic sclerotherapy, active bleeding occurs, requiring timely surgical intervention. Preventive ES when changing the condition of varicose veins from III and IV to II degrees was effective in patients with varicose veins of III and III - IV degrees (66.7%, 57.1% and 66.7%, 60%, respectively).

Based on the above, we proposed an algorithm for the treatment of children with PG (Fig. 2). The clinic has developed a diagnostic and treatment algorithm that takes into account the peculiarities of bleeding from varicose veins syndrome in children with cirrhosis.

Results: Patients admitted with acute esophageal-gastric bleeding underwent emergency endoscopy. Endoscopic examination of the esophagus and stomach revealed varicose veins of grade I in 12 children, grade II in 26 patients, grade III in 50 and grade IV in 40 patients. The source of bleeding in 69 children was identified in the esophagus (in c/3 and n/3) in 9 patients in the cardiac part of the stomach. In all patients with bleeding of 1 or 2 degrees, bleeding was observed after an increase in body temperature and taking NSAIDs, and after endoscopy it was revealed that they had VVs in the stomach. An additional risk factor for bleeding from esophageal urinary tract is esophagitis of varying degrees (mild, moderate and severe).

At the height of bleeding, the Patzirov operation was performed in 25 (45.45%) patients, the Nazirov operation - 16 (29.09%), Tanner-Bairov operation - 14 (25.46%).

Performing APP operations at the peak of bleeding

Name of operation	ВППП (n= 9)	Extra hepaticПП (n = 46)	All
Circular sewing of gastric by Bayrov	1	13	14
Ligaturic transection of gaster by Nazirov	3	16	16
Operation of Patsiora	5	17	25
All	9	46	55

In order to monitor the effectiveness of surgical correction of PG, endoscopic examinations were performed 2-3 months after surgery and in the long-term period every 6-12 months.

Long-term follow-up has focused on the degree of regression of recurrent bleeding and phlebectasia. To do this, every 6 months after surgery, patients underwent a two-stage examination. At the first stage, an objective assessment of well-being was carried out, an examination was carried out covering recurring episodes of bleeding. At the second stage, FGDS control was performed to control phlebectasia.

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The complex of postoperative treatment measures included:

1. To counteract the aggressive effects of gastric juice on the mucous membrane of the digestive system, antacids and astringents were used (almagel in doses of 10-15-15 ml / day in 2-3 doses and 2.5-5 ml animal fat through a tube. Nutrition through a tube was started from the second day.
2. To normalize the motor-evacuation function of the digestive system, 10-15 ml of cerucal, duphalac per day were used, bowel cleansing was carried out with repeated siphon enemas.
3. Antibacterial therapy - broad-spectrum antibiotics.
4. To stimulate the regeneration of the mucous membrane of the stomach and esophagus, B vitamins and retail oil were prescribed.
5. Hepatoprotectors (ursofalk, essentielle, karsil, LIV-52, heptral, hepamerz) were used in patients with UT, taking into account the possibility of activation of the cirrhotic process and for the prevention of liver failure, of which hepamerts were preferred.

The absence of bleeding, subjective improvement in well-being, primary healing of postoperative wounds, and the absence of activity of the cirrhotic process indicate that the postoperative period is proceeding well.

If, despite hemostasis, the cirrhotic process in the liver is activated, the appearance of ascites is considered a satisfactory course of the postoperative period.

The operation was considered unsatisfactory in the presence of postoperative relapse of COPD, the development of symptoms of splenic infarction (pain syndrome manifested by hyperthermia), submucosal abscess and the formation of liver failure.

In the postoperative period, after the Patzirov operation, the following were noted: good results in 3 (13.6%) patients, satisfactory results in 9 (40.9%), dissatisfaction in 10 (45.4%). In 2 patients with suppuration of the postoperative wound, the wound healed a second time; in 1 patient, ascites appeared on the 14th day after surgery, which was eliminated.

In the postoperative period, after Nazirov's operation, good results were observed in 5 cases (31.25%), satisfactory - in 9 (56.25%), unsatisfactory - in 2 (12.5%) patients. In one patient, symptoms of hyperthermia and paresis persisted for 3 days after surgery. After 3 days the patient's condition improved.

After the operation, circular suturing of the stomach according to Bairov, out of 14 (25.46%) children who had circular sutures placed on the stomach after the operation, 6 (42.86%) had a good postoperative period, 6 (42.86%) had a satisfactory one, 2 (14.28%) had an unsatisfactory course. One patient developed ascites and this condition improved slightly with the addition of diuretics. One patient developed clinical signs of acute liver failure after surgery, and this

condition resolved by the 4th postoperative day. In this group, the patient died due to worsening liver failure.

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Table 6

Short-term complications after APR surgery performed at the peak of emergency bleeding

Post operative puss	1	2		1			4
Under the diafragmaric abcess		1					1
The stroke of spleen	–	–	–	–	–	2	2
Ascites	1	1	1	–	–	–	3
Repeat Bleeding	2	4		2	1	2	11
Lethality	2	–	1	–	1	–	4

Thus, in the postoperative period of observation of various types of AR in the near future, of the total number of patients, good results - 81.82% (55 people), satisfactory - 9.09% (5 people), unsatisfactory - 9.09% (5 people). Recurrent bleeding was registered in 1 person (1.8%) (after ligature transection of the stomach according to Nazirov), a lethal result - in 1 patient (2.3%) (after circular suturing of the stomach according to Bairov).

The absence of recurrent bleeding from the IVC is one of the effective indicators of the APR operation. Bleeding from phlebectasis was observed up to 5 years in 70% of patients after surgery. According to Bairov, recurrent bleeding was observed in 28.2% of patients after applying circular sutures to the stomach and in 25% of patients after ligature transection of the stomach according to Nazirov. In the group of patients who underwent abdominal surgery, the incidence of bleeding lasting up to 5 years was relatively low - 25% of cases.

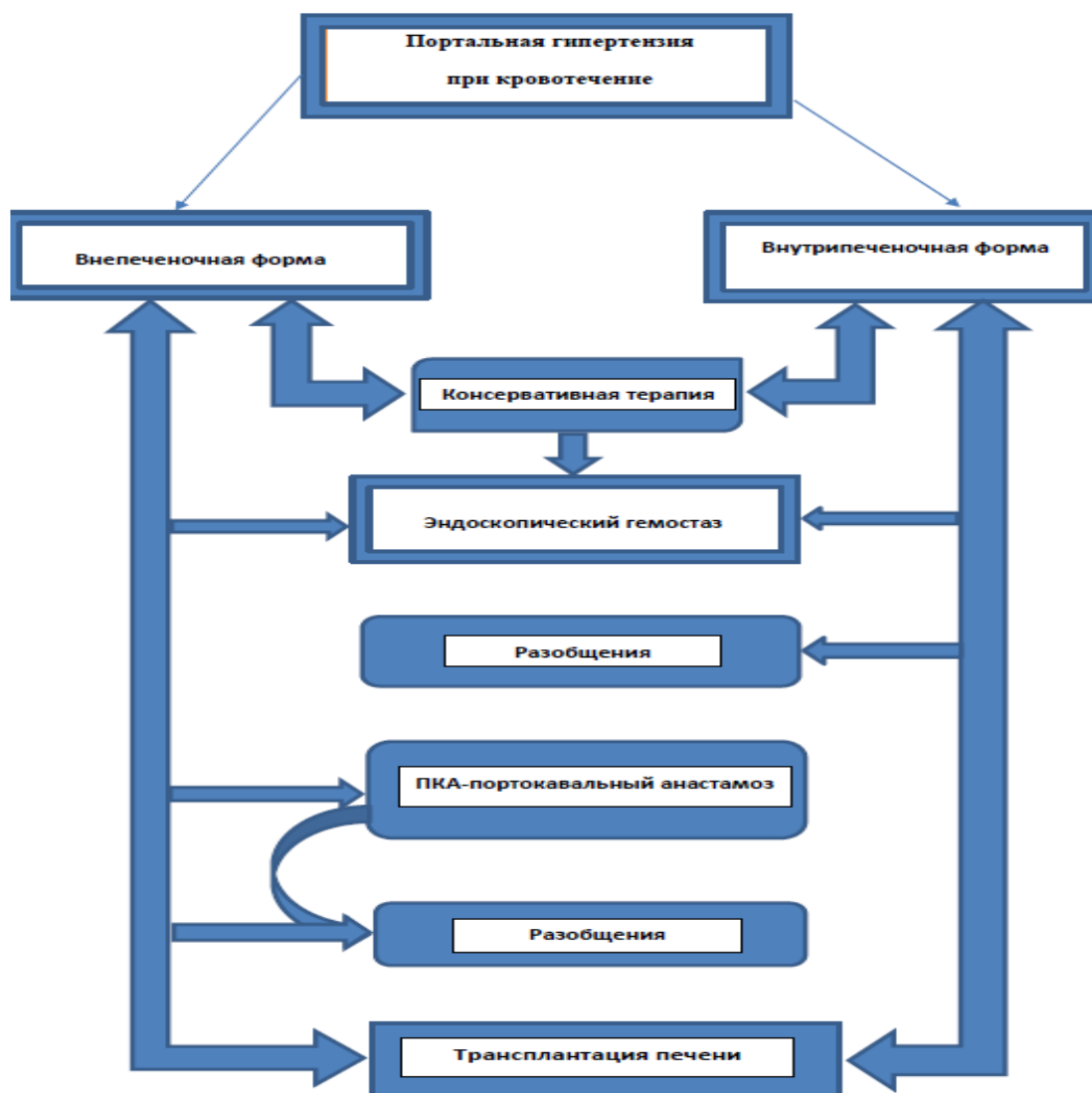
Three months after surgery, 23 children underwent endoscopic examination, and a year later, 18 children underwent endoscopic examination. During the examination, attention was paid not only to the degree of clarity of varicose veins, but also to their intensity, changes in the mucous membrane of the esophagus and stomach.

After Bairov's operation, within 6 months after applying circular sutures to the abdomen, VVC in the upper third of the esophagus disappeared in 4 (40%) patients, and VVC in the stomach disappeared in 4 (40%) patients. Up to 12 months, varicose veins of the middle third of the esophagus disappeared in 5 (50%) patients, varicose veins of the stomach - in 2 (20%) children. After 12 months, 6 (60%) patients had grade I, 3 (30%) patients had grade II, and 1 (10%) child had grade III VLE.

After Nazirov's operation, ligature transection of the stomach for 3 months in 1 (25%) child - in the upper third of the esophagus, in 1 patient - loss of VVC in the stomach. When examined after 12 months, it was found that in 1 (25%) child - in the middle third of the esophagus, in 1 (25%) patient - loss of VKV in the stomach. The plexus of varicose veins disappeared within 6 months after surgery. 12 months after surgery - 2 (25%) grade I, 3 (75%) patients - grade II VKV.

The effectiveness of APP operations performed at the peak of bleeding and during an urgent delayed procedure

Вид операции	Интраоперационное прекращение кровотечения		Рецидив кровотечения						Полные рецидивы кровотечения	
			До 12мес		До 3 лет		До 5 лет			
	Абс.	%	Абс.	%	Абс.	%	Абс.	%	Абс.	%
ОперацияПациора	25	100%	3	12%	3	12%	4	16%	10	40%
Круговой шов на желудке по Баирову	14	100%	2	14,4%	1	7,1 %	1	7,1%	4	28,6%
Лигатурная трансекцияжелудка по Назирову	16	100%	1	6,25%	1	6,25%			2	12,5 %
Всего	55	100%	6	10,9%	5	9,1%	5	9,1%	16	29,2%



The figure shows an algorithm for choosing treatment tactics for children with cirrhosis complicated by bleeding from varicose veins of the esophagus and stomach.

Thus, over the course of 3–12 months, the dynamics of circular suturing of the stomach according to Bairov, ligature transection of the stomach according to Nazirov and, to a lesser extent, the Patsior operation were approximately the same. Although the diameter of the VVs decreased during the first 12 months after the Paciora procedure, their tension remained. At the moment, in patients with varicose veins, there were no circulating sutures in the stomach according to Bairov and ligature transection of the stomach according to Nazirov.

Patzior's operations, circular suture according to Bairov, gastric ligation by Nazirov 3-4 years after the operation revealed the development of new varicose veins, and by 5 years after the operation they were close to the initial values before the operation. In patients, the regression of phlebectasis stopped after 4 years, and by At 5 years of age, a slight increase was observed with a minimal risk of bleeding.

In our opinion, the operation of ligature intersection of the stomach, circular sutures through all layers of the stomach in the Bairov operation allows you to completely separate the two systems and reduce intramural blood flow along the walls of the stomach. A relatively long-term hemostatic result was achieved after applying gastric circulation according to Bairov and ligature transection of the stomach according to Nazirov.

However, recurrent bleeding was observed in 31% and 28% of cases, respectively. We believe that this phenomenon is associated with the preservation of collaterals in the lower third of the esophagus. Our views are confirmed by the dynamics of regression of VLE in the postoperative period. It has been established that the reversal of phlebectasia after the Patziora operation ceases after 6–12 months and reaches the initial level by 3 years. According to Bairov, the stomach returns to its original level after applying blood circulation and ligating the stomach according to Nazirov.

The analysis showed that if operations were performed on children at an early age, then recurrent bleeding does not depend on the occurrence of surgical interventions.

The effectiveness of these operations in patients of different age groups was analyzed to determine the need for such compounds.

Conclusions: Thus, our studies have shown that in children with portal hypertension, the abdominal stage of the operation is the most optimal method of stopping bleeding from varicose veins of the esophagus and stomach. The best results were obtained in patients after Tanner-Bairov operations and Nazirov operations for total division of the gastroesophageal collector. Patziora procedures are preferred in children due to the very low trauma at the peak of esophageal and gastric varicose vein bleeding and the fact that they are performed in a very short period of time. We have also approved the use of Tanner-Bairov procedures in young children without opening the stomach.

If appropriate conditions are available, we recommend the endoscopic method of hemostasis - ligation of varicose veins for all forms of hepatitis.

Nazirov's total separation operations are the most optimal method of performing delayed operations. Based on the proposed algorithm, we recommend performing PCS after EL in HSV, first performing EL at the peak of bleeding in HSV, and then referring patients for transplantation.

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