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Conclusion from the Doctor's Dissertation Martynov V.L. On Surgical Correction of Digestive System Refluxes

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Abstract

Annotation On the basis of 40 years of work on the treatment of 415 patients with gastroenterocolitis clinic, the author revealed the presence of refluxes due to anatomical defects of the Bauhinia valve (its failure) and the duodenum (chronic duodenal obstruction) at all levels of the gastrointestinal tract. After surgical correction of these anatomical breakdowns, the author states a significant improvement in all indicators of the state of both the digestive system and some extraintestinal manifestations, possibly the onset of precancer. The results obtained allowed the author to conclude that there are no "functional" disorders, this is only the level of our knowledge. Operations have been developed to correct the failure of the Bauhinia flap, intraoperative prevention of refluxes, and indications for methods of correcting chronic disorders of duodenal patency.

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Introduction

Among the many diseases known to medicine, there is a group of diseases that cause difficulties for doctors of a special kind, which are associated with the fact that in patients, despite the abundance of complaints and their persistence, it is not possible to detect the morphological basis of clinical symptoms. Unlike organic, these diseases are usually called functional. These diseases reduce the working capacity of the population and are often the cause of its temporary loss. Epidemiological data indicate that 40 - 60% of adult patients and 90% of sick children with complaints of functional disorders of this system suffer from functional diseases of the digestive system. Difficulties arise in the treatment of patients with functional diseases, since traditional approaches to the treatment of patients with this pathology are ineffective. A significant number of people, mainly of working age, suffer from functional gastroenterological diseases. Refluxes of the digestive system, which some researchers consider to be precancerous conditions, belong to functional diseases [1, 2]. In medicine, there is still no scientific causal definition of the concept of "reflux". The view on reflux in the digestive system is far from unambiguous. Without taking reflux into account, many diseases are considered functional: irritable bowel syndrome [3, 4]. functional form of chronic disorders of duodenal patency [6, 7], duodeno-gastric reflux is considered by some authors as a physiological phenomenon, as a consequence of the functional form of chronic disorders of duodenal patency, gastroesophageal reflux - as a functional pathological condition [8]. The presence of such functional diseases is recorded by the Rome II criteria (1988). In patients with irritable bowel syndrome with irrigoscopy R.M. Lychkovsky (1982) in 70% revealed reflux of the contrast agent into the ileum, [9, 10]. Duodeno-gastric reflux in 45-100% was recorded in patients with diseases of the hepatogastropancreatoduodenal zone [11, 12]. Duodeno-gastric reflux is considered as the cause of peptic ulcer disease [13, 14, 15]. Gastroesophageal reflux is observed in 50-80% of patients with bronchial asthma [16, 17]. Reflux gastritis is diagnosed in 50% of patients with bronchial asthma [18, 19]. The relationship between the pathology of the gastrointestinal tract (GIT) and the corresponding symptomatology in patients with dermatoses is a well-known fact. The small intestine, the changes of which play an important role in the pathology of the digestive tract, is the organ of the digestive canal most responsible for the development of dermatoses. So, D.M. Roberts, D.E. Preston (1971) revealed enterocolitis in 2/3 of patients with psoriasis, a relationship between the intensity of skin manifestations and the activity of ileocolitis. Thus, the presence of refluxes in the digestive tract, their causal characteristics in the pathogenesis of both extra- and intraintestinal pathology is an important but little-studied problem, and conservative treatment of refluxes is ineffective. This work is based on the analysis of a comprehensive clinical, laboratory and instrumental study of patients with proven irrigoscopy with the failure of the Bauhinia valve. The work is based on the analysis of a complex clinical - laboratory and instrumental study of patients with proven irrigoscopy with the failure of the Bauhinia valve.

Results

For 20 years of scientific work before the operation, 415 patients were examined and then operated on; after the operation, control examination was carried out in 127 (30%) patients within 1 to 7 years. The residence of the patients was not limited to Nizhny Novgorod. A significant part of 127 people (30%) lived in the Nizhny Novgorod region and other regions of Russia, which made it difficult to carry out mutual communication. Another part of 161 people (40%) felt absolutely healthy and refused to be examined after the operation. The age of patients is from 7 to 67 years, the largest number of them (294) falls on the most able-bodied years - 30 - 49 years. The majority (85%) noted a significant prescription of clinical gastroenterocolitic manifestations: in 32% from 5 to 10 years, in 53% - more than 10 years.

For abdominal pain, 97% of patients previously sought medical help, 79% were repeatedly hospitalized for various pathologies of the digestive system, 281 patients had previously undergone various operations on the organs of the gastrointestinal tract, but recovery did not occur. In addition, 202 patients had previously undergone appendectomy. Attention is drawn to the fact that 111 patients underwent irrigoscopy, although its result, reflux of the contrast medium into the ileum, was regarded as normal. Taking into account the ineffectiveness of the previously repeated conservative

treatment, all 415 patients underwent bauginoplasty ccording to the developed techniques, which in 171 cases was supplemented with dissection of the Treitz ligament, and in 72 cases with duodenojejunostomy. In 76 patients in our clinic, the operation was combined with other interventions on the abdominal organs. The methods of study are diverse and include physical, biochemical, microbiological, radiological, immunological, endoscopic, instrumental, ultrasound, computer and morphological studies. The results were processed statistically, which determines their significance. In all 415 examined with irrigoscopy, the failure of the Bauhinia valve was found. The following concomitant pathology was revealed: skin diseases in the form of various dermatoses - in 36, bronchial asthma - in 52, diabetes mellitus - in 5, hypertension, coronary heart disease - in 28, vegetative dystonia syndrome - in 129, chronic tonsillitis and pharyngitis - in 37, gastric ulcer and 12-PC - in 61, chronic calculous cholecystitis - in 20, dolichosigma - in 2, motile cecum - in 3, chronic colonic stasis - in 12, rheumatoid arthritis - in 3. It was possible to compare research methods before and after surgery in 68 patients after bauginoplasty, in 24 - after bauginoplasty and dissection of Treitz's ligament, in 19 - after bauginoplasty and duodenojejunostomy.

The creation of a model of varying degrees of arteriomesenteric compression of the lower-horizontal part of the 12-PC supplements the significance of the anatomical relationship between the aorta, the upper mesenteric artery and the lower-horizontal part of the 12-PC, as one of the causes of chronic duodenal obstruction and clarifies the indications for the imposition of duodenojejunostomy and as the most adequate method for the correction of chronic duodenal disorders patency with a distance between the aorta and the superior mesenteric artery of 20 mm or less. The developed techniques of bauginoplasty are simple, available for any surgical department (RF Patents No. 1790397, No. 202664, No. 2225173, No. 2253378). Several surgical techniques have been proposed, which means the development of the idea of creating the most areflux ileocecal junction with an assessment of complications, which led to their decrease from 10.4% to 3.2%. The latter technique compares favorably with those previously proposed both by the author himself and by other authors: there is no migration of the prosthesis into the intestinal lumen, there are no phenomena of obstruction, no recurrence of the failure of the Bauginia valve was detected due to the discrepancy of the superimposed serous-muscular sutures that create the arefluxity of the ileocecal junction when performing other techniques. The essence of the technique is as follows. We form a free isolated section of the greater omentum with a diameter of 1 - 1.5 cm and a length equal to the circumference of the ascending colon. Through the cut out section of the greater omentum, by injecting - puncturing, we carry out a ligature of non-absorbable polypropylene material. The ligature is designed to create constancy to the circumference of the structure, and the strand of the greater omentum is intended to reduce the pressure of the ligature on the intestinal wall, which reduces the effect of the ligature cutting through the intestinal wall tissues. An omentum with a ligature is carried out behind the ascending gut 1-1.5 cm distal to the ileocecal fistula and through the mesentery of the terminal ileum 1-1.5 cm proximal to the ileocecal fistula. The terminal section of the ileum is fixed for 6-7 cm with interrupted serous-muscular sutures for the free tape of the ascending section of the colon; we tie the ends of the thread, forming a ring with a diameter equal to the diameter of the ascending colon. Excess ends of the thread and the gland are excised. With an increase in the intracavitary pressure in the cecum and ascending intestines up to and above the intracavitary pressure in the ileum, the large intestine compresses the ileum on the frame, the function of which is performed by a ring of thread with an omentum. Thus, a construction is created that works in an autonomous arbitrary mode, which ensures the arefluxity of the ileocecal junction. One of the reasons for the congenital form of the primary failure of the Bauhinia valve - undifferentiated connective tissue dysplasia (RF Patent No. 215110) has been identified.

Considering the importance of the imposition of an areflux toncolicolon anastomosis after right-sided hemicolectomy, this anastomosis has been developed and put into practice (RF Patent No. 2253390). For internal drainage of cavities in the abdominal cavity and retroperitoneal space, a "plug" was developed for the small intestine leading loop, which excludes

compression, ischemia and necrosis of the intestinal wall with subsequent migration of the created structure into the lumen of the gastrointestinal tract (RF Patent No. 2253379), which is typical for A. AND. Shalimov. For all methods of the operation, patents were obtained, which determines the legitimacy of their implementation by the author. Analyzing the results of a comprehensive study of patients with reflux disease before surgical treatment, one can note a significant frequency of simultaneous registration of colonic reflux, duodeno-gastric reflux, gastroesophageal reflux. If the clinical manifestations of duodeno-gastric reflux, gastroesophageal reflux (heartburn, bitterness in the mouth, belching, regurgitation of food) are well known, the manifestations of colonic reflux with the failure of the Bauginia valve remain poorly understood. In 415 patients diagnosed with irrigoscopy, Bauhinia flap failure had enterocolitic manifestations variable in the range of 65 - 100%: rumbling and bloating, abdominal pain, constipation, diarrhea and loose stools, bad breath, food allergies, weight loss. After bauginoplasty, these complaints also turned out to be variable, but in the range with significantly lower rates - from 7 to 21%, which determines the significance of the insolvency of the bauginia valve in the formation of enterocolitic manifestations, in the formation of irritable bowel syndrome, and bauginoplasty - in their elimination, in the elimination of the syndrome irritable bowel. At the same time, the cause of congenital, primary failure of the Bauhinia flap was revealed. The combination of external and visceral phenotypic markers gave grounds to defend that the primary incompetence of the Bauhinia valve belongs to the number of visceral manifestations of connective tissue dysplasia and to consider the primary failure of the Bauhinia valve in the nosological framework of this anomaly.

In addition to enterocolitic complaints, patients with Bauhinia valve failure noted in the range of 87 - 95% such manifestations of duodeno-gastric reflux and gastroesophageal reflux as belching with air, regurgitation of food, bitterness in the mouth, heartburn. According to the conclusion of most studies, such complaints are due to a chronic violation of duodenal patency. Given this provision, we undertook a comprehensive study of patients with Bauhinia valve failure in order to diagnose chronic duodenal obstruction. When determining the distance between the aorta and the superior mesenteric artery by the methods of ultrasound and CT at the level of the lower-horizontal part of the 12-PC, it was found that in 93% of patients the indicated distance is 20 mm or less, and this, according to the results of our experiment on creating a model of arterio-mesenteric compression, is one of the causes of chronic violation of duodenal patency. Under the experimental conditions in the anatomical room, we have reproduced various degrees of arteriomesenteric compression of the free area of the small intestine between two plates. By changing the distance between the plates, we change the degree of chronic impairment of duodenal patency, while passing through the intestine a constant definite amount of experimental fluid with the determination of the time of its passage through the section of the intestine. We determined that when the intestine with a diameter of 2.5 cm is compressed by 0.5 cm (a decrease by 20% from the initial diameter), a violation of the passive passage through the intestine of the experimental fluid begins, which in clinical conditions is an anatomical cause of chronic violation of duodenal patency in the form of arteriomesenteric compression and is already an indication for duodeno-jejunostomy. With a decrease in the diameter of the intestine by 1.0 cm (40% of the initial level), the time for fluid passage increases by 40%. With a decrease in the diameter of the intestine by 1.5 cm (60% of the initial level), the time of passage of the fluid increased by 70%. With a decrease in the diameter of the intestine by 2 cm (by 80% of the initial level), the time of passage of fluid through the intestine increased by 320%. At the same time, we recognize the impossibility of the absolute transfer of the results of this experiment to the organism. In this group of patients with FGDS, duodeno-gastric reflux was detected in 63%, signs of reflux - esophagitis - in 61%, pylorus dehiscence - in 72%, cardia dehiscence - in 59%. Fluoroscopy of 12-PC with a probe without hypotension in 119 patients with incompetence of the Bauhinia valve revealed the following signs of arteriomesenteric compression: duodeno-gastric reflux - in 66%, antiperistalsis in 12-PC - in 80%, contrast delay in the middle third of the lower-horizontal part of 12-PC - in 70%, late emptying of 12-PC (later 40 seconds) - in 55%, high duodenojejunal transition - in 90%, eunoduodenal reflux - in 45%.

When performing floor manometry using the

open catheter method in order to determine the intracavitary pressure, it was revealed that out of 102 patients with Bauhinia valve failure, 94 (92.2%) had hypertension in 12 PCs, and 73 (71.6%) had hypertension in the stomach. The results obtained show the simultaneous presence of large intestinal reflux, duodeno-gastric reflux, gastroesophageal reflux, as a consequence of the failure of the Bauhinia valve and chronic violation of duodenal patency, the correction of which is necessary to normalize the passage of the gastrointestinal tract elimination (RF Patent No. 2229847). Bauginoplasty in combination with duodenojejunostomy was an adequate volume of surgical correction of the Bauhinia valve failure and chronic duodenal obstruction. So, if the clinical gastroenterocolitic manifestations of reflux disease, determined in the range of 87-100%, after performing one bauginoplasty decreased in the range of 7-43%, after bauginoplasty in combination with dissection of Treitz's ligament decreased in the range of 13-50%, then after bauginoplasty in combination with duodeno-jejunostomy bauginoplasty bauginoplasty, they are noted in the range of 5 - 27%. According to EGD performed on patients with reflux disease, it was noted that endoscopic signs of chronic duodenal obstruction (duodeno-gastric reflux, dehiscence of the cardia and pylorus) in 19 patients after bauginoplasty supplemented with duodenojejunostomy decreased statistically significantly. So, the gaping of the cardia from 17 clinical observations decreased to 7 ($p = 0.044$), the signs of reflux - esophagitis - from 16 to 5 ($p = 0.026$), the gaping of the pylorus - from 15 to 9 ($p = 0.041$), duodeno-gastric reflux - from 17 to 8 ($p = 0.004$). Probe fluoroscopy of 12-PC without hypotension before and after surgery (N = 40) showed that bauginoplasty performed in isolation eliminates only antiperistalsis in the small intestine, without eliminating other causes of chronic impairment of duodenal patency (N = 16). Similar data were noted after bauginoplasty performed in combination with dissection of Treitz's ligament (N = 7), where only distal periduodenitis and proximal perioenitis were eliminated, but arterio-mesenteric compression of the lower-horizontal part of 12-PC remained. Only bauginoplasty in combination with duodeno-jejunostomy (N = 17) adequately and statistically significantly eliminates all the causes and consequences of chronic disorders of duodenal patency. So, according to the data of probe X-ray examination of 12-PC without hypotension, the number of clinical observations of duodeno-gastric reflux decreased from 17 to 3 ($p = 0.008$), antiperistalsis in 12-PC - from 17 to 2 ($p = 0.004$), contrast delay in the average a third of the lower horizontal part - from 17 to 4 ($p = 0.013$), late emptying of 12-PC (later 40 seconds) - from 16 to 1 ($p = 0.003$), antiperistalsis in the jejunum - from 10 to 1 ($p = 0.007$).

Floor manometry using the open catheter method (N = 41), performed before and after the operation, also confirms that an adequately performed bauginoplasty with simultaneous duodeno-jejunostomy statistically significantly normalizes intracavitary pressure in the stomach and 12-PC. Thus, hypertension in 12 PCs decreased from 17 clinical observations to 8 ($p = 0.013$), hypertension in the stomach - from 16 to 7 ($p = 0.023$). Isolated bauginoplasty (N = 16) reduced hypertension in 12-PC only in 4 of 16 ($p = 0.134$), and in the stomach - in 8 of 16 ($p = 0.013$) patients. Bauginoplasty in combination with dissection of Treitz's ligament (N = 8) reduced hypertension in 12 PCs in 2 out of 8 patients ($p = 0.074$), in the stomach - in 3 out of 5 ($p = 0.479$). The above results of the study show a causal relationship between the failure of the Bauhinia valve and chronic impairment of duodenal patency, on the one hand, as causes, duodeno-gastric reflux and gastroesophageal reflux, on the other hand, as a consequence, and determine the most adequate amount of surgical aid for their elimination - bauginoplasty in combination with duodeno-jejunostomy. In our opinion, irreversible changes in the neuromuscular apparatus of the pylorus and cardia remain in a small proportion of patients who have undergone the most optimal surgical treatment, bauginoplasty in combination with duodeno-jejunostomy, duodeno-gastric reflux and gastroesophageal reflux. , which is the result of an untimely, delayed operation. The pathological effect of colon reflux is confirmed by a decrease in body weight, detection of colitis in 87% and ileitis in 58% of patients during irrigoscopy and fibrocolonoscopy, the presence of dysbiosis of the large intestine in 62% and of the small intestine in 95%, and infection of bile in portion "B" in 73 % and a fasting portion of the stomach contents in 66%, an increase in the level of medium blood serum molecules in 82%, the development of vegetative dystonia syndrome in 92%, a decrease in antimicrobial

resistance of the body in 60% of patients. The normalizing effect of bauctoplasty is confirmed by an increase in body weight in all patients who had previously had its deficit, a decrease in clinical observations to 20% (according to irrigoscopy data) and to 46% (according to fibrocolonoscopy) signs of colitis, small intestine dysbiosis up to 14%, the frequency of bile infection. "B" up to 42% and a fasting portion of stomach contents up to 33% of clinical observations. Normalization of the level of medium molecules of blood serum in 34% of patients, a decrease in the level of medium molecules in 50%, disappearance in 66% and a decrease in 17% of vegetative dystonia syndrome, an increase in antimicrobial resistance of the body in 50% of patients are confirmation of a decrease in the syndrome of chronic autointoxication.

Our research confirms the ideas of I.I. Mechnikov (1908, 1913) on the development of chronic autointoxication emanating from the large intestine. But we show the reason - the failure of the Bauginia flap and point to Bauginoplasty as a method of its surgical correction. And to eliminate the dysbiosis of the large intestine, it is necessary to perform bauginoplasty with subsequent courses of treatment with biological products. Considering the infection of the stomach, gallbladder and small intestine and the normalizing effect of bauginoplasty in reducing the frequency of dysbiosis at different levels of the gastrointestinal tract, we have the right to assert that the failure of the bauhinia valve is the main reason for the ascending pathway of infection of the digestive system, affecting the etiopathogenesis of many diseases. The study of the content of blood serum antibodies to peptidoglycan Staphylococcus aureus in NBZ revealed a decrease in their titers in 60% of patients, which, apparently, indicated a decrease in the antimicrobial resistance of the organism. PD normalized ($p = 0.041$) antimicrobial resistance in 50% of patients. Analyzing the results obtained, we have developed a working classification of NBZ from the standpoint of its surgical correction. Dispensary observation is subject to patients with a subclinical form of Bauhinia valve failure. The operation is indicated for the clinical form of the Bauhinia flap failure. The clinical form includes all cases of the failure of the Bauhinia flap, proven during irrigoscopy, with clinical manifestations and corresponding complaints. Our patients belong to this stage of the disease. The clinical stage, taking into account the severity of manifestations and chronic intoxication, is conventionally divided into two stages: subcompensated and decompensated. The subcompensated stage is characterized only by local "intestinal" symptoms of ileitis and colitis. The qualitative reaction of urine to indican is negative. We observed such patients in 5%. In addition to local "intestinal" symptoms, the decompensated stage is characterized by chronic autointoxication, which is clinically manifested as a syndrome of vegetative dystonia. The qualitative reaction of urine to indican is positive. From the contents of the stomach, duodenum 12, from the bile, microflora is sown, persisting in the large intestine. This stage includes patients with pathology depending on the presence of chronic autointoxication (dermatoses, food allergies, bronchial asthma, joint diseases). The overwhelming majority of the patients examined by us (95%) belonged to this group. In combination with a chronic violation of duodenal patency, we distinguish: failure of the Bauhinia valve without a combination with a chronic violation of duodenal patency (such patients accounted for only 2% of clinical observations); failure of the Bauhinia valve in combination with chronic impairment of duodenal patency - 98% of patients we attributed to this group.

Contraindications to bauginoplasty are the processes that caused strictures of the colon below the ileocecal junction (tumors, ulcerative colitis, Crohn's disease, adhesive disease). If these contraindications are not observed, conditions may arise for the emergence of a closed space between the Bauhinia valve with absolute areflux function and the cause of the obstruction located distally, which will cause a significant increase in intraluminal pressure in this segment of the colon with possible diastatic perforation. The combination of the failure of the Bauginia valve with clinical manifestations of chronic impairment of duodenal patency at the distance between the aorta and the superior mesenteric artery at the level of the lower horizontal part of the duodenum 12 is 20 mm or less is an indication for the combined performance of bauginoplasty and duodenojejunostomy. If the specified distance is more than 20 mm, correction of chronic impairment of duodenal patency in the presence of distal periduodenitis and proximal perieunitis should consist in Strong's operation and dissection of adhesions. The

proposed number of techniques of bauginoplasty means the development of the idea of creating the most areflux, reliable, safe, easy-to-design operation. Bauginoplasty techniques by other authors are based on the creation of new and strengthening of existing anatomical structures with interrupted serous-muscular sutures. We used this technology when performing the first technique of bauginoplasty, but it did little to justify itself. Serous-muscular sutures were erupted and after about a year clinically and according to irrigoscopy, a recurrence of the failure of the baugínia valve occurred, which in some cases determined the need for a repeated bauchtoplasty using a more advanced technique. Two personal observations of the migration of a construction from a vascular prosthesis into the lumen of the colon confirm the opinion of some authors about possible inflammatory and necrotic changes in tissues around the allot tissues and possible complications. This forced us to abandon the use of the strip of the vascular prosthesis, replacing it with a free isolated section of the greater omentum with a non-absorbable suture passed through it by means of an injection - a puncture. The basic scheme of the operation remained the same. Analysis of 61 clinical observations allows us to state a statistically significant trend in the reduction of postoperative complications as a result of the use of the technique of bauginoplasty with the formation of a ring - a frame from a free isolated section of the greater omentum with a non-absorbable prolene thread passed through it - from 10.4% to 3.2% (p <0 , 05). For the first time, a simultaneous morphological study of the gastrointestinal mucosa was carried out at various levels, depending on the failure of the Bauhinia valve and chronic violation of duodenal patency and after their surgical correction. During endoscopic examination, biopsies of the mucous membrane of the colon, ileum, 12-PC, stomach and esophagus were taken.

When examining the mucous membrane of the large intestine and ileum under conditions of failure of the Bauhinia valve, its normal structure was noted only in 12%, and various stages of the chronic inflammatory process - in 88% of clinical cases. Bauginoplasty reduces chronic inflammation in the colon in 69%, and normalizes it in 19% of patients. Taking into account the increase in oncological lesions of the colon at the present time, the frequent presence of insolvency of the Bauhinia flap in Crohn's disease, the unclear role of the insolvency of the Bauhinia flap in the etiopathogenesis of ulcerative colitis, the data obtained are promising in the prevention of these diseases, eliminating the pathological effect of an excessive pool of bile acids on the colonic mucosa. intestines with the failure of the Bauhinia valve. One of the objectives of the work was to morphologically confirm the advantages of bauginoplasty in combination with duodeno-jejunostomy in the adequacy of surgical correction of reflux disease based on the analysis of the study of biopsies of the upper digestive tract of the mucous membrane (esophagus, stomach and 12-PC). We analyzed the data of 12 patients, who underwent a study of biopsies of the mucous membrane of the esophagus, stomach and 12 - duodenal ulcer in conditions of reflux disease and after duodeno-jejunostomy in combination with bauginoplasty. Under conditions of reflux disease, superficial inflammation of the mucous membrane was noted in 6 biopsies, in 6 others, pronounced inflammatory changes were revealed to the entire depth of the mucous membrane (diffuse esophagitis), unchanged esophageal mucosa was not noted. Erosion was identified in one study. After surgery, unchanged mucous membrane was noted in 3 biopsies, in 9 there were signs of superficial inflammation, diffuse inflammation was not revealed. In the fundus of the stomach in conditions of reflux disease, inflammatory changes in the mucous membrane to the entire depth were revealed in all 12 biopsies, in 6 the inflammation was in the active stage. After surgery, inflammatory changes in the mucous membrane to the entire depth were noted in 6 biopsies, superficial lesions were also detected in 6 biopsies, moderate inflammation activity was diagnosed in 1 case.

In the antrum of the stomach in all 12 biopsies, inflammatory changes in the mucous membrane were revealed throughout the entire depth, in 3 cases they were in an active stage, and in 2 they were atrophic. After surgery, inflammatory changes in the mucous membrane to the full depth were identified in 10 cases with moderate activity of the process in 2 cases. Superficial antral gastritis was recorded in 2 cases, atrophic - also in 2. In 12 PCs, in all 12 cases, chronic inflammation of the mucous membrane covered its entire thickness, after surgery - only in 6 cases, in other 6 cases it was superficial. Summarizing the data obtained from the study of 48 biopsies (12 each from

the mucous membranes of the esophagus, fundus of the stomach, antrum of the stomach, 12-PC) taken before surgery, superficial (initial) inflammation was noted only in 6 cases, but at the same time, diffuse inflammation (on all layers of the mucous membrane) was noted in 42 biopsies, in 9 cases an active stage of inflammation was noted, and in 2 cases the changes in the mucosa were atrophic. No unchanged mucous membrane was registered. After bauginoplasty in combination with duodenojejunostomy in 48 biopsies taken from the same departments, in the same quantities, in the same patients, unchanged mucous membrane was found in 3 patients, signs of superficial inflammation were already noted in 23 biopsies due to a decrease in diffuse inflammation to 22 cases , the active stage of inflammation also decreased to 3 observations, atrophy of the mucous membrane remained at the same level - in 2. Thus, bauginoplasty in combination with duodeno-jejunostomy significantly improves the morphological characteristics of the mucous membranes of the esophagus, stomach and 12-PC, reducing the activity of the chronic process, reducing the depth of the lesion. The morphometric parameters of the mucous membrane also confirm the reduction of inflammation, the normalization of the characteristics of the cells of the mucous membrane, which prepares the structural basis for the normalization of their function. So, after correction of only one link of reflux disease, namely the failure of the Bauhinia valve, out of 43 patients, the normal acidity state of gastric juice was found in 15, before surgery - in 6 ($p = 0.022$), hypoacid - in 4, before surgery - in 9 ($p = 0.114$), anacid - in 8, before surgery - in 14 ($p = 0.108$), hyperacid - in 16, before surgery - in 15 ($p = 0.5$). The data obtained prove that reflux is a precancer, explain the theory of cancer formation by R. Vikhrov about the long-term effect of irritating substances on tissues, indicate the prospects of studying cancer of the colon, stomach and esophagus from the standpoint of reflux disease and its correction.

The analysis of the results obtained confirms the relationship between the state of the gastrointestinal tract, refluxes and the development of peptic ulcer disease, bronchial asthma, dermatoses, which were previously noted as separate observations that were not linked to each other in a specific system. This work shows the pathology of the valve structure of the digestive tract, which explains the development of many links in the etiopathogenesis of peptic ulcer, bronchial asthma and dermatoses, linking them into a single system. Clinical enterocolitic manifestations, depending on the presence of Bauhinia valve failure and chronic duodenal obstruction, and their frequency in 149 patients with gastric ulcer and 12-PC, in 228 patients with bronchial asthma, in 54 with dermatoses were studied. It turned out that in patients with peptic ulcer disease, these complaints were noted in the range of 14 - 100% of cases, in patients with bronchial asthma - in the range of 41 - 92%, in patients with dermatoses - in the range of 12 - 78% of cases. Of 415 patients operated on from the position of valvular gastroenterology, 42 had gastric ulcer and 12 PCs, 52 had bronchial asthma, and 36 had dermatoses. The results obtained convince the perspective of the taken direction. Thus, during the primary clinical analysis of the results of surgical treatment of patients with gastric ulcer and 12-PC within a period of 1 to 4 years, it was revealed that patients who underwent bauginoplasty with duodenojejunostomy after surgery had a stable remission during the course of peptic ulcer disease in 30 patients (In 2 cases, peptic ulcer disease 12-PC recurred after anastomositis in the duodenojejunostomy area), in patients who underwent bauginoplasty with dissection of Treitz's ligament after surgery in the same follow-up period, stable remission was achieved in 3 patients, in 7 patients peptic ulcer disease recurred. Thus, eliminating the reflux of 12-PC contents into the stomach, we eliminate the factors of aggression and increase the protective factors of the gastric mucosa, which plays an important role in the etiopathogenesis of peptic ulcer disease, stating that the ulcer is a secondary disease that requires elimination of the causal moment of stagnation for its cure (RF Patent No. 2261052).

All 52 patients with bronchial asthma underwent plastic surgery of the ileocecal obturator apparatus developed in the clinic, 46 - with simultaneous correction of chronic impairment of duodenal patency (34 - dissection of Treitz's ligament, 12 - duodenojeju-nostomy). The operation brought success to the majority of patients who underwent correction of the Bauhinia valve failure and chronic duodenal obstruction (RF Patent No. 2184495). So, asthma attacks are not observed in 12, asthma attacks are less - in 40, hormones stopped taking - 18, hormones are used less frequently and in a lower dose - 20. A retrospective

analysis of the volume of surgical aid for patients with bronchial asthma revealed the most significant drawback - inadequate in some cases of correction of chronic violation of duodenal patency, namely, the dissection of the Treitz ligament, and not duodenojejunostomy. Surgical correction of reflux disease eliminates the following pathophysiological effects of the gastrointestinal tract on the course of bronchial asthma: gastroesophageal reflux with over-irritation of the vagus nerve, followed by microaspiration; pathological viscero-visceral reflexes with centripetal impulses to the central nervous system and centrifugal impulses to the smooth muscles of the bronchi; chronic autointoxication; food and microbial allergies; decreased function of the immune system. Bauginoplasty was performed in 36 patients with concomitant dermatoses. The revealed skin changes were reduced to three groups of morphological patterns. First, dystrophic were obligate for all obtained skin preparations. The second group of morphological processes manifested in the skin is cell proliferation. First of all, these are capillary endothelial cells. The endothelium of most capillaries becomes high, and multi -row layers are often formed, which almost completely cover the lumen. Finally, the third group of processes recorded in the skin is expressed in the form of diffuse or focal dermatitis. Inflammation, as a rule, is combined with an intense reaction of the vascular bed, edema and extravasation. One year after the operation, dermatologists registered a stable stage of remission. We see the reasons for the positive changes in the skin in patients with dermatoses in the normalization of liver functions, in the elimination of chronic autointoxication, in the normalization of the absorption function in the small intestine, in the elimination of food and microbial allergies, vitamin deficiencies. The above in order to clarify the causal relationship between the gastrointestinal tract and the skin allowed us to introduce a new term - "enterogenic dermatopathy", replacing the generally accepted definition of J. Marks et. S. Shuster (1970) "dermatogenic enteropathy".

The results obtained allow us to conclude that the failure of the Bauhinia valve and the chronic violation of duodenal patency, as a result of which reflux disease develops, are links in the etiopathogenesis of gastric ulcer and 12-PC, bronchial asthma, dermatoses, forming: - Infection with the colon microflora of the overlying parts of the digestive system (dysbiosis) with the development of autointoxication and a decrease in antimicrobial resistance of the mucous membrane of the gastrointestinal tract and the whole organism as a whole; - chronic inflammation throughout the entire digestive tract with the formation of pathological centripetal impulses to the central nervous system and pathological centrifugal impulses to organs and systems; - syndrome of vegetative dystonia; - food and microbial allergies; - duodenogastroesophagolingual reflux with subsequent microaspiration and bronchospasm; - prolonged irritation by the contents of the stomach and 12-PC esophageal interoreceptors with the development of bronchospasm - prolonged duodeno -gastric reflux, which in the initial stages causes an increase in the acidity of gastric juice and the development of 12-PC peptic ulcer, and later, with degeneration of the gastric mucosa and a decrease in its protective function, the development of gastric ulcer, dissection of the Treitz ligament; - dysfunction of the liver as a result of an increased intoxication load on it; - development of hypovitaminosis;

Conclusion

Thus, we conclude that there are no functional diseases of the gastrointestinal tract, the structure and function are the same. In the overwhelming majority of cases, the causes of refluxes of the digestive system are the failure of the Bauhinia valve and chronic violation of duodenal patency. The consequence of reflux is both intra- and extraintestinal pathology. Adequate correction of the failure of the Bauhinia valve and chronic violation of duodenal patency is the etiopathogenetic surgical treatment of reflux disease of the digestive tract.

References

1. Vitebsky, Ya.D. Fundamentals of valvular gastroenterology / Ya.D. Vitebsky. - Chelyabinsk: Yuzhno - Uralsk. publishing house, 1991. - P.303. ISBN 5-7688-0483-8.
2. Onopriev, V.I. On the program of improving the population of Russia through the widespread introduction of high-tech methods of diagnosis, treatment and prevention of precancer and small cancer of the digestive system. Onopriev // Sat. articles. - Krasnodar .: Quality, 2004 .-- 194 p.
3. Sheptulin, A.A. Irritable Bowel Syndrome. Modern concepts of pathogenesis, diagnosis, treatment /

A.A. Sheptulin // Klin. honey. - 1997. - No. 9. - S. 26-29.

4. Maev, I. V. Features of the course of diseases of the digestive system in patients with primary mitral valve prolapse / I.V. Maev, A.N. Kazyulin, E. D. Valtsova // Wedge. Honey. - 2000. - T.78, No. 1. - pp. 22 - 26.
5. Kasumyan, S.A. Functional and organic disorders of duodenal patency / S.A. Kasumyan, M.A. Alibegov. - Smolensk: publishing house - in the Smolensk state. honey. acad., 1997.- - 135 p. ISBN 5-86064-027-7.
6. Camilleri, M. Management of the irritable bowel syndrome / M. Camilleri // Gastroenterology. - 2001 / - Vol. 120. - P. 652 - 668.
7. Alexander - Williams, J. Alkaline reflux gastritis: A myth or a disease? / J. Alexandr - Williams // Amer. J. Surg. - 1982. - No. 143. - P. 17 - 21.
8. Lychkovsky, R.M. Syndrome of "irritated" colon / RM Lychkovsky // Surgery. - 1982. - No. - S. 49 - 52.
9. Lychkovsky, R.M. Irritable bowel syndrome / R.M. Lychkovsky // Ros. zhurn. gastroenterol., hepatol., coloproctol. - 2000. - No. 5. - P.70 - 75.
10. Mikhas'kiv, I.N. The role of reflux of duodenal contents in the genesis of gastric stump cancer after gastric resection / IN Mikhas'kiv // Surgery. - 1980. - No. 2. - P. 44 - 51.
11. Gowen, G.F. Spontanens enterogastric reflux- gastritis and esophagitis / G.F. Gowen // Ann. Surg.-1985.-Vol.202, No. 2.-P. 170-175.
12. Vitebsky, Ya.D. Fundamentals of valvular gastroenterology / Ya.D. Vitebsky. - Chelyabinsk: Yuzhno - Uralsk. publishing house, 1991. - P.303. ISBN 5-7688-0483-8.
13. Nahrwold, D.L. Bile as a gastric secretory stimulant / D.L. Nahrwold // Surgery. - 1972. - Vol.71. -P. 157 - 160.
14. Davenport, H.W.A. The secretion of acid by the mous stomach in vitro / H.W.A. Davenport, V. Jensen // Gastroenterology. - 1948. - Vol. 11. - P.227.
15. Chuchalin, A.G. Bronchial asthma: T.1,2 - / A.G. Chuchalin. - M .: Agar, 1997 Vol. 1. - 431s., T.2. - 399 p. - ISBN 5 - 89218 - 056 - 5 4.
16. Mansfiled, L.E. Gastroesophageal reflux and respiratory disorders: a review / L.E. Mansfiled // Am. Allergy. - 1988. - Vol.62, No. 3. - P. 158 - 161.
17. Beldanov, V.A. On the frequency of damage to the organs of the gastroduodenal zone in patients with bronchial asthma / V.A. Beldanov, N.K. Alekseeva, Ya.M. Vakhrunov // Klin. honey. - 2004. - No. 4. - p. 69 - 72.
18. Gamsutdinov, N.U. The state of the mucous membrane of the gastrointestinal tract in patients with bronchial asthma / N.U. Gamsutdinov, A.A. Abusuev, M.-R.G. Ataev // National Congress on Respiratory Diseases: Sat. summary. - M. –2002. - Pulmonology. - No. 4. - P. 33.
19. Roberts, D.M. Intestinal disaccharidase activity in propiatic enteropaty / D.M. Roberts, I.E. Preston // Scand. I. Gastroenterol. - 1971. - Vol.6. - P.93.