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CROSSING OF A WANDERING SPLEEN (a case report)

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ABSTRACT

The presented case is interesting because in the literature there are very few data on the observation of this disease. For the first time this pathology was described in 1667 by the Dutch physician Van Horn and confirmed by autopsy data.

Inversion of the spleen in adults with a wandering spleen is a rare pathology in abdominal surgery and requires urgent surgical intervention, and the use of instrumental methods of research allows you to effectively address issues of preoperative diagnosis and management of the patient after splenectomy.

抽象的

所呈现的案例很有趣，因为在文献中关于这种疾病的观察数据很少。1667年，荷兰医生

VAN HORN 首次描述了这种病理，并通过尸检数据证实了这一点。

成人游走性脾脏倒置是腹部手术中的罕见病理，需要紧急手术干预，使用仪器研究方法可以有效解决脾切除术后患者的术前诊断和管理问题。

INTRODUCTION

Dystopia of the spleen or a wandering spleen, is a rare pathology caused by congenital

Received: August 12, 2021 / Revised: September 08, 2021 / Accepted: September 30, 2021 / Published: October 10, 2021

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insufficiency of the ligamentous apparatus and atypical location of this organ.

The spleen is fixed by ligaments, which are the folds of the peritoneum directed to the gates of the spleen (Fig. 1).

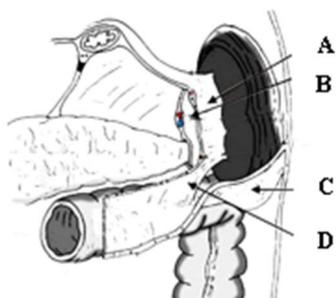


Fig. 1. Ligaments of spleen: A – lig. gastrosplenic; B – lig. lienorenalis; C – lig. phrenicocolicum; D – lig. lienocolicum.

Knowledge of the anatomy of the ligaments of the spleen helps with the implementation of surgical interventions on the spleen, stomach, pancreas and colon.

Dystopia of the spleen is one of the most rare clinical findings and is found in less than 0.5% of cases of the total number of splenectomy, in which an abnormal location of the spleen in the abdominal cavity or in the small pelvis is detected. Soleimani M. et al. performed an extensive literature search on this issue and found that from 1895 to 2005 were described 238 cases of spleen dystopia, most of which are presented as descriptions of isolated clinical cases. In the available literature review from 1895 to 2016 are presented 454 observations of patients with this pathology [2].

MATERIALS AND METHODS

Patient A.M., 20 years old, was admitted to the surgical department of the 3-clinic of the Tashkent Medical Academy on June 14, 2019 with the diagnosis: "Primary: Acute thrombosis

of the splenic artery and vein. Complications: Pain syndrome. Concomitant: Chronic anemia 1 degree".

The patient is a native of Tashkent, temporarily not working. From the anamnesis, the patient considered herself for 2 months, when the patient noted pain in the left hypochondrium, nausea, dry mouth, a forced position due to pain, and general weakness. The patient was treated on an outpatient basis, with a temporary pain relief effect. During the last 10 days, the above symptoms with intensification, in connection with which the patient was examined, where Splenomegaly, spleen hemangioma, ascites were detected by ultrasound. Also, the patient was performed Irrigoscopy - Hirschsprung's disease and MSCT of the abdominal cavity, where a dense formation under the left dome of the diaphragm, 11x9.5x4.5 cm in size, welded to the small intestinal loops (lymphoma?), Splenomegaly, thrombosis of the splenic vein is determined. In this regard, the patient on 12.06.2019 addressed the Republican Specialized Scientific and Practical Center of Oncology and Radiology, where the patient's oncological pathology was excluded. With the above complaints, the patient turned to the 3-clinic of TMA and was hospitalized in the surgery department.

When entering the general condition of moderate severity, skin and visible mucous membranes pale color, body temperature of 37.4 ° C. There is no rash on the skin and visible mucous membranes. Peripheral lymph nodes are not enlarged.

In the lungs, breathing is heard from both sides, weakened, no wheezing. Respiratory rate 18 per minute. With auscultation of the heart tones are clear, clean, rhythmic, heart rate 86 per minute. Blood pressure 120/80 mm Hg. Art. Tongue dry,

covered with white bloom. On the white line of the abdomen, a postoperative scar with dimensions of 25x0.5 cm is determined (on January 15, 2019, she underwent the operation "Sigmoid colon reversal. Hagen-Thorne mesosigmoplication. Transanal intubation. Sanation and drainage of the abdominal cavity" with a diagnosis of Dolikhosigma. colonic obstruction. Diffuse serous peritonitis "). The abdomen of the usual form, asymmetrical, by increasing the left half, is involved in the act of breathing, soft, painful in the left hypochondrium. Peritoneal symptoms and muscle tension of the anterior abdominal wall is not. Liver and spleen are not enlarged. Peripheral edema no. Chair and diuresis free, regular.

Blood type and Rh factor: B (III) Rh + (positive). Complete blood count of 06/14/2019: hemoglobin 94 g/l, erythrocytes $3.5 \cdot 10^{12}/l$, leukocytes $7.0 \cdot 10^9/l$.

Urinalysis from 06/14/2019: the reaction is acid, protein and glucose - negative, the epithelium - 0-1-2-3/1, leukocytes - 1-2-3/1, salt - ++.

Biochemical analysis of blood from 06/14/2019: alanine aminotransferase 30,0 U/L, aspartate aminotransferase 26,0 U/L, bilirubin 8.3 mmol/l, urea 6.03 mmol/l, creatinine 74.0 mmol/l, total protein 66,0 g/l.

Coagulogram dated 06/14/2019: fibrinogen 3.60 g/l, prothrombin index 94%, international normalized ratio 1.17, hematocrit 36%, thrombotest 6, VSC 3'40"-4'00".

Ultrasound from 15.06.2019: signs of infarction of the spleen, with possible abscess formation (spleen 278x112 mm, biconvex shape with rounded edges, the upper third of the spleen is represented by a heterogeneous rounded education 133x91 mm.

The patient was consulted by a cardiologist, cardiological pathology was not detected and

treatment of the underlying disease was recommended.

The following treatment was carried out in the hospital: for the purpose of infusion therapy - Glucose solution 5% -400 ml, Solution sodium chloride 0.9% -400 ml, Solution Adexin 200 ml, Solution Sepid 250; in order to improve the rheology of blood – Solution Sorbitol 200; with anti-inflammatory purpose – Solution Diclofenaci 3.0; with analgesic purpose – Solution Analgini 50% -2.0 + Solution Dimedroli 1% -2.0 ml; with antibacterial purpose - Ceftriobak 1.5 + Solution Novocaini 0.5% -5.0, Solution Lefloksoli 100 ml.

Given the persisting pain in the left hypochondrium, increased pain in the dynamics of the patient on June 17, 2019, the preoperative diagnosis was made "Primary: Acute thrombosis of the splenic artery and vein. Complications: Splenomegaly. Heart attack spleen. Pain syndrome. Companion: Chronic anemia of 1 degree "and the operation" Laparotomy. Splenectomy. Drainage of the abdominal cavity. In the left subphrenic space the spleen is absent. The spleen was located in mesogastric over the descending colon, dimensions 15x12x9 cm, black, dense consistency, torsion of the legs is observed at the gates of the spleen (Fig. 2, 3). Splenectomy was performed. The sigmoid colon is dilated, enlarged (Fig. 4).

Postoperative diagnosis: «Primary: Spleen dystopia. Complication: Torsion of the legs of the spleen. Splenomegaly. Necrosis of the spleen. Pain syndrome. Concomitant: dolichosigma. Adhesive disease of the abdominal cavity. Chronic anemia 1 degree».



Fig. 2. Schematic representation of dystopia of the spleen with a twisted leg

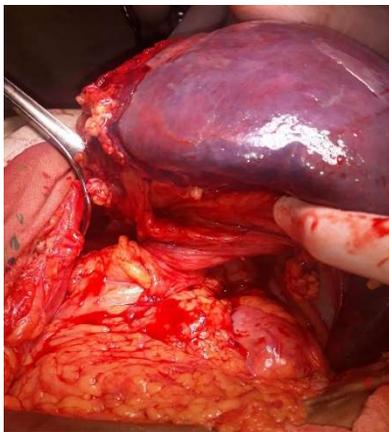


Fig. 3. Dystopia spleen with twisted legs;

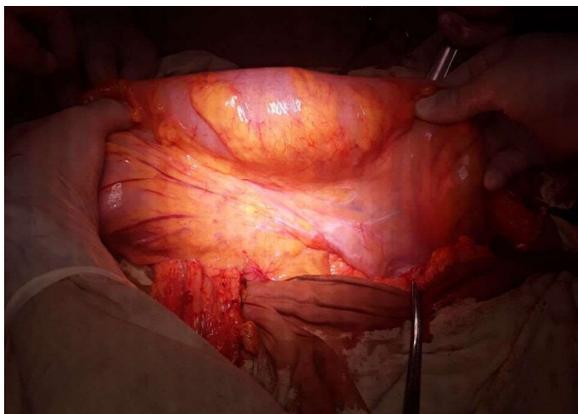


Fig. 4. Dolichosigmoid

The postoperative period was uneventful, a course of antibacterial, infusion, analgesic therapy was conducted. Also, the patient underwent blood and plasma transfusion at the 1st dose. In the dynamics of hemoglobin 90 g / l. On the control ultrasound on the echograms of the abdominal cavity, the presence of free, restricted fluid was not detected; in the projection of the spleen bed, the presence of a residual cavity was not detected. The postoperative wound was kept clean, healed by primary intention. On the 4th day after the operation period, the drainage tube from the abdominal cavity was removed. Histological examination of 06/17/2019: necrosis of the spleen.

The patient underwent postoperative antibacterial, infusion, analgesic therapy, the patient was discharged from the department in a satisfactory condition.

DISCUSSION AND RESULTS

Options dystopia spleen varied. The spleen may be located transversely under the left half of the diaphragm, including between the arch of the stomach and the diaphragm, may be in the umbilical hernia, in the retroperitoneal space. When the internal organs are reversed, the spleen is on the right, not the left. With the displacement of the spleen in the pelvis, it must be distinguished from the ovarian tumor. A case of spleen prolapse in the scrotum is described. Having found a dystopic spleen, it is necessary to check whether the spleen is really missing in its proper place in order to exclude the possibility of two or multiple spleens. It is known that the surplus (or supplementary) spleen is not uncommon. True, most often the accessory spleen is small and located in the gate of the main spleen, along the splenic vessels, in the gastro-splenic ligament. But there are cases when quite

large accessory spleens are localized in the greater omentum, in the mesentery of the transverse colon, in the capsule of the kidney, in the tail of the pancreas, in Douglas space, etc. [1]. Cases when in an abdominal cavity there were described 20-45 additional spleens. Finally, spleen tissue may be incorporated into the parenchyma of another organ. With the weakness of the ligament apparatus, the spleen becomes mobile ("wandering" spleen). The reasons for this can be both congenital and acquired factors. Congenital causes include the underdevelopment of the ligament apparatus of the spleen, in particular the splenic-colon and gastro-splenic ligaments. Acquired causes include injuries and pregnancies accompanied by high levels of estrogen. For the majority of the cases described, a "wandering" spleen is characterized, as a rule, asymptomatic or scarce symptoms, including subacute abdominal pain and characteristic gastrointestinal symptoms - complaints of nausea, vomiting, and constipation. However, in the event of a spleen twisting, a picture of an acute abdomen arises. Torsion of the vascular pedicle of the spleen leads to its infarction and necrosis. In clinical practice, spontaneous inversion of the spleen is very rare, so an accurate diagnosis is established, as a rule, only during surgery. In some cases, a dystopic spleen can cause compression of the adjacent organs of the gastrointestinal tract and lead to the development of intestinal obstruction. [3].

Kolocey V.N. and Strapko V.P. In 2015 described a clinical case with acute intestinal obstruction. The patient was assigned a set of conservative measures aimed at resolving acute intestinal obstruction [3, 5]. The diagnosis of acute intestinal obstruction was not in doubt, and in connection with the data obtained during the physical examination, ileocecal invagination was

suggested as a possible cause of obstruction [4, 5]. The therapy performed was not successful, and therefore the patient was offered surgical treatment. Dystopia of the spleen and welded loops of the small intestine on the inner surface of the spleen were detected intraoperatively [3]. Uncomplicated forms of splenoptosis, as a rule, do not have clinical manifestations and turn out to be a diagnostic finding with ultrasound, magnetic resonance and multispiral computer tomography, radionuclide scintigraphy. If indicated can be performed angiography or diagnostic laparoscopy [2, 6].

CONCLUSION

The method of choice of surgical treatment for splenic dystopia is splenectomy. In some cases, the detection of a "wandering" spleen, including with the torsion of the vascular pedicle, performs detortion with splenopexy. Such an operation is recommended for young patients, taking into account the risk of post-splenectomy sepsis [1, 3].

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