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SIMULTANEOUS OPERATIONS IN THE AUTOIMMUNE THROMBOCYTOPENIC PURPURA

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Summary

The basic information about the essence of simultaneous operations (CO) and the possibilities of their implementation in diseases of various organs and the spleen in modern surgical practice is presented. The results of simultaneous operations in hematological pathology in 98 patients were analyzed. Taking into account the specifics of hematological pathology, indications and the most optimal options for such operations have been determined. Simultaneous operations are a promising method of treating several surgical diseases in hematology practice.

Keywords

diseases of the blood system, thrombocytopenia, splenectomy, simultaneous operations.

APL (Vergelgoffe's disease, primary immune thrombocytopenic purpura), according to most authors, develops as a result of an immune conflict directed at the antigens of platelets or megakaryocytes and is characterized by a decrease in the number of thrombocytes (<150 x 109 L) and hemorrhagic syndrome. Most authors believe that Verlhoff disease develops as a result of an immune conflict directed at the platelet antigens or megakaryocytes and is characterized by a decrease in the number of platelets (<150 x 109 L) and hemorrhagic syndrome. The ATP is found in both adults and children, its frequency ranges from 1 to 13% per 100,000 people according to data fromU.S.Altibayev (1984), Robert-Mac Milan (1997, USA), K.M. Abdukadyrov (2004), MustafakulovG.I.(2006,2008,2023).

Splenectomy is one of the most effective treatments for APL. The immediate effect after a splenectomy is observed in 70-90% of cases, remission for more than 10 years is achieved in 78%, 20-year non-recurrence survival is 67% [6, 15,16].

Simulated surgical interventions (CO) in the surgical practice have been known for a long time. The first such operation was reported by A. Claudius in 1735: the patient was performed appendectomy combined with hernioplasty[3,29,34,37].

At present, simulated operations are understood as surgical intervention, performed simultaneously on two or more organs, regarding the etiological unrelated diseases [27,34,35].

Interest in simulated operations is consistent and due to the fact that combined surgical pathology, according to WHO [4] combination of diseases occurs in 20-30% of surgical patients [4]. That is, a combined pathology occurs in every third patient of the surgical profile, but paradoxically, the share of the same simulated operations is not more than 6% of all interventions performed [15].

According to the same WHO data, 30% of patients with abdominal pathology of surgical profile do not have two but more combined diseases requiring prompt treatment [19].

In the last two decades of the twentieth century, the number of publications on the possibility of performing simulated surgical interventions has increased and amounted to 500-700 publications per year (according to MEDLINE search results, EMBASE).

The advantages of simulated surgeries are not only that they cure a patient from several diseases at once, but also that they save the patient from the increased risk associated with repeated surgical interventions, repeated drugs and, respectively, with complications of surgical and anesthetic care [11-13]. It should not be forgotten that by agreeing to the simultaneous treatment of several surgical diseases, the patient is further freed from the difficult for his mental state decision-making procedures.

According to the authors of a number of publications, the one-time rather than phased treatment of patients with combined surgical pathology reduces by half the cost of medication, the length of patient stay in hospital and the overall temporary incapacity for work and, halving the cost of treatment [10].

Due to the increase in life expectancy, the improvement of diagnostic technologies, there is a trend towards an increase in the number of patients with 2-3 concomitant surgical diseases, including hematological patients. The presence of combined surgical and hematological diseases in many patients, the frequency of which, according to WHO data, is 15-20%, puts the task before surgeons and hematologists of the possibility of simultaneous correction of such pathology [1,7].

Increasing the effectiveness of treatment of hematological patients requiring surgical intervention in the presence of combined surgical pathology is achieved by performing simultaneous operations. However, in the scientific literature, evidence-based studies on this problem are not often encountered, although in practice, many surgeons and hematologists note the need for such operations [17,23,25].

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To determine the sequence of operations, it is necessary to perform the intervention primarily due to the underlying disease, as well as to be guided by aseptic considerations, the importance of the operation stage, and the desire to reduce the intervention time, although the issue should be resolved individually in each specific case [11, 15, 22, 28].

Autoimmune thrombocytopenic purpura (ATP) is one of the most common forms of hemorrhagic diatheses. According to V.G. Vogralik (1961), this pathology accounts for 43.1% of all forms of hemorrhagic diatheses.

The basis of ATP pathogenesis lies in the autoimmune process [18], when, due to various reasons, antithrombocytic autoantibodies are synthesized in the human body, which also have anti-megakaryocytic orientation [3,7,8,14,16].

In the case of continuous recurrent course of chronic ATP or frequent exacerbations with bleeding from the mucous membranes, it is necessary to resolve the issue of planned splenectomy. At the same time, clinical and laboratory remission is achieved in 70-90% of patients. The main mass of antiplatelet antibodies is synthesized in the spleen, after removal of which the antibody titer significantly decreases and is not detected. Splenectomy is a large operation, the risk of post-splenectomy sepsis exceeds the risk of serious bleeding. Therefore, splenectomy should be performed no earlier than 12 months after the diagnosis is established. The accepted age for splenectomy is five years and older, which is related to the maturation of the immune system by this age. Indications for planned splenectomy are: frequent exacerbations with bleeding from the mucous membranes, with a platelet count of less than 30,000.

In this case, in 12%-15% of cases, splenectomy is combined with other surgical interventions [26].

Patients with anemia and hemostasis disorders require thorough examination and special preparation before performing simultaneous operations, which determines the outcome of the operation.

The successes of anesthesiology, transfusiology, the improvement of surgical techniques, rational preoperative preparation, and postoperative management allow for the expansion of indications for simultaneous operations in hematological patients.

The article is dedicated to the technical aspects of performing SE, describing various factors influencing the trauma and success of the operation. The study was conducted to develop indications and contraindications for the use of simultaneous operations (MO), determine the most optimal options for combining various operations, implement them in clinical practice, and analyze the results of their use in patients with hematological pathology.

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Materials and methods

The object of the study was 98 patients aged 18 to 51 years with ATP and other surgical pathology, who was under examination and treatment in the surgical departments of the Research Institute of Hematology and the PC of the Republic of Uzbekistan.

Of these, 46 (47%) are men and 52 (53%) are women. The duration of the disease is from 6 months to 14 years. Patients received an average of 2 or more times different glucocorticoid preparations. All patients underwent inpatient and outpatient treatment from 1 to 3 or more times with temporary improvement.

The following studies were conducted on patients: general blood and urine analysis, biochemical studies, coagulogram, serum iron, hepatitis markers, circulating immune complexes, blood clotting time and duration of bleeding, myelogram. Depending on the nature of the concomitant pathology, we additionally used ultrasound of the abdominal organs, fibrogastroduodenoscopy, R-study of the chest, contrast radiography of the gastrointestinal tract, ECG, magnetic resonance imaging and X-ray computed tomography, spirography.

All patients were admitted with hemorrhagic syndrome. Of these, 24 (26%) patients were admitted with nasal bleeding, 15 (15%) with gingival bleeding, 12 (12%) women had hyperpolymenorrhea along with other types of hemorrhagic syndrome, and the rest had skin manifestations.

1 (1%) patient had hematuria. In most cases, ecchymoses and petechiae were accompanied by mucous bleeding.

Patients with platelets ranging from one to 10 x 109/l were admitted, and post-hemorrhagic anemia of varying degrees was noted.

Of these, 14 (14%) patients had various surgical pathologies, including the umbilical hernia in 4 patients with CATP: 3 of them were women, 1 man. Men have inguinal hernia, 3 women have chronic calculous cholecystitis, 2 have chronic hemorrhoids: of which 1 woman, 1 man, lipomas of various sizes in 2 men.

According to indications, splenectomy was performed in the upper-middle section in 98 patients with combined surgical pathologies, and simultaneous surgery was performed in 14 patients with various concomitant surgical pathologies. In two patients with umbilical and inguinal hernias, after conservative treatment before the operation, platelets were isolated, due to pronounced bleeding during the operation, only splenectomy was performed.

Results and discussion

In 4 patients aged 20 to 47 with CABG and umbilical cord hernia, after preoperative preparation, platelets rose from 29,000 to 37,000. Without signs of bleeding, the operation was performed with an upper laparotomy incision,

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splenectomy was performed using the method adopted in the clinic, with minimal blood loss of about 50-70 ml, and with careful hemostasis, herniotomy was performed according to the Sapezhko and Meyo method, with minimal blood loss of about 15-20 ml. After the surgical period, two patients developed a subcutaneous hematoma, which was drained on the 2nd day. On the 2nd day after the operation, the platelets increased from 70,000 to 164,000.

In 3 patients aged 38 to 45 with GATP and inguinal hernia, skin eximosis was observed in two, and minor petechiae appeared in the extremities, after preparation for surgery, platelets increased from 32,000 to 47,000. No signs of bleeding were observed, and splenectomy was performed, with approximately 70 to 115 ml of blood lost, followed by thorough hemostasis and Girard-Spasokokkomsky hernia resection with Kimbarovsky sutures, with minimal blood loss of approximately 30-40 ml. In the postoperative period, one patient developed a subcutaneous hematoma, drainage was performed on the 2nd day. After a day, the platelets increased from 56,000 to 102,000.

In 3 patients aged 25 to 37 with HACCP and chronic calculous cholecystitis, without signs of bleeding, after preparation for surgery, platelets increased from 35,000 to 39,000 and in the upper-middle section, after splenectomy (blood loss from 60 to 100 ml), the gallbladder was removed from the bottom with blood loss up to 50 ml, 60 ml of hemorrhage was discharged from the drainage tube of the subphrenic region in 2 days, on the 3rd day, there was no clear discharge from the drainage tube, the tube was removed. On the 2nd day after surgery, platelets increased from 67,000 to 73,000 and on the 3rd-4th day from 124,000 to 180,000.

In 2 patients aged 19 to 28 with GAPT and external hemorrhoids (frequent bleeding in the anamnesis), skin eximosis was observed in two, and after preparation for surgery, platelets increased from 42,000 to 53,000. No signs of bleeding were observed, and splenectomy was performed with minimal blood loss of approximately 30 to 60 ml and hemorrhoectomy according to the Millegon-Morgani method. After surgery, platelets increased from 57,000 to 92,000 on the 1st day and from 164,000 to 190,000 on the 2nd-4th day.

CO was performed in two stages. The first stage of the spleen surgery was performed, and the second was the intervention on another organ. All patients discharged in satisfactory condition, healing per prima.

Discussions of results

All operations were performed according to plan, taking into account operational risk. In these patients, the postoperative period had some peculiarities (the need to prescribe anesthetic drugs persisted for 2-3 days, the duration of bed

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rest was 3-7 days, taking into account that patients with ATP received hormonal drugs for a long time). In 4 patients, postoperative wound hematoma was noted.

In CO, it is advisable to perform the operation on the spleen in the first stage. The second stage of surgical treatment is preferably performed with concomitant surgical pathology. Early motor activity prevents postoperative pneumonia and thromboembolic complications.

It is unjustified to operate on patients with pronounced post-hemorrhagic syndrome, as this increases the risk of surgical interventions and worsens the course of the postoperative period, complications increase during and after surgery.

The peculiarity of CO in spleen pathology is that they are produced from two different surgical approaches, and this can complicate the course of the postoperative period due to the severity of the pain syndrome. At the same time, in most observations, careful selection of patients and adequate choice of anesthesia option eliminated possible negative phenomena. There were no fatalities in any of the cases.

FINDINGS

Considering the above, it can be concluded that CO in the spleen and other organs is a promising method of simultaneous surgical treatment of several diseases in providing specialized planned surgical care. One of the important principles of performing CO on the spleen is the simultaneous application of two operations using acceptable surgical treatment methods. We consider the use of simultaneous operations justified in cases where refusal to perform multiple surgical interventions simultaneously can lead to serious complications exacerbating the course of the underlying disease. CO should be performed on the spleen in specialized departments and clinics with adequate examination capabilities and sufficient experience of operating surgeons.

Advantages of simultaneous operations in hematological practice: Reducing the number of hours under general anesthesia. Possibility of simultaneous treatment of surgical pathology. Saving time. Simultaneous surgical intervention allows the patient to reduce their total hospital stay. Saving of funds. Psychological comfort. For the patient, a simultaneous operation is perceived as a single surgical intervention, significantly reducing the level of stress and anxiety before and after surgery.

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