

OUR EXPERIENCE IN THE TREATMENT OF ABDOMINAL TUBE PARENCHYMATIC ORGANS INJURIES WITH COMBINED DAMAGE

Mustafakulov Ishnazar Boynazarovich

Samarkand State Medical University, Republic of Uzbekistan

Relevance. The main problem is the diagnosis and treatment of concomitant closed abdominal trauma, accompanied by shock against the background of massive intra-abdominal bleeding in case of damage to the liver and spleen [Khadzhibayev A.M. et al., 2011]. Hospital mortality in this variant of pathology ranges from 17.3 to 72.7% [1.3.5.18].

The urgency of the problem, according to Panasyuk A.I. et al. (2005), is due to the continued growth of concomitant abdominal trauma, while a large number of complications (45.7-69.9%) and high mortality (16.2-69.5%), according to the authors, are associated with the lack of rational generally accepted surgical tactics in case of damage to parenchymal organs. [11,14,16,19].

In blunt abdominal trauma, liver damage occurs in 10 to 17% [2,4,8,20,21]. Among the closed injuries of the abdominal organs, ruptures of the spleen account for 16-30% [6,7,12,13,15].

Purpose: to improve the results of treatment of damage to parenchymal organs in concomitant abdominal trauma.

Materials and methods. We analyzed the treatment and outcomes of 539 patients with closed injuries of the abdominal organs for 2011-2021. According to the mechanism of injury, the victims were distributed as follows: in 190 (35.3%) cases, a blow was struck to the stomach, in 205 (38.0%) cases, a road injury, in 84 (15.6%) cases, a fall from a height, in 60 (11.1%) - compression. Young people predominated by age: 355 victims under 30, 137 from 31 to 50, and 47 over 51.

Of the 539 victims, 199 (36.9%) were admitted under the influence of alcohol. Before 6 hours from the moment of injury, 439 victims were admitted, before 12 hours - 58, before 24 hours - 15, and later than 24 hours - 27 victims. Most often, with a closed abdominal injury, damage to parenchymal organs was noted 131 (24.3%) in combination with damage to the intestines (44), bladder (15), kidney (12). Extensive retroperitoneal

hematomas were more often observed with damage to the chest, pelvis and spine.

Results. Of 539 patients with closed abdominal injuries, 269 (49.9%) were operated on. Of these, 131 (48.7%) had damage to the liver and spleen. According to the localization, damage according to the Moore classification was : the liver of I degree in 9 people, II degree - in 18 , III degree - in 25, IV degree - in 17 and V degree in 3 victims. Spleen ruptures were diagnosed with grade I - in 6 patients, grade II - in 15, grade III - in 26, grade IV - in 10, and grade V - in 2 patients.

The severity of clinical manifestations in this pathology depends entirely on the degree destruction of the liver, the amount of blood loss, developed shock and hepatic-renal syndrome.

A feature of liver wounds is massive bleeding without a tendency to self-stop. It is due to the dual blood supply to the hepatic tissue (from the hepatic artery and portal vein), the presence of non-collapsing and long-term non-thrombotic damaged vessels. Prolonged profuse bleeding is a feature of the structure of the vessels of the liver, which do not subside, but keep on the stroma, as on stretch marks. Apparently , there is a combination of both of these mechanisms.

The main complaints of patients are general weakness, dizziness, abdominal pain of varying intensity. Despite the fact that some authors do not attach much importance to them and consider them to be an uncharacteristic symptom in this injury, we did not observe a " painless " rupture of the liver tissue in any patient in the clinic . Pallor of the skin, cold extremities, nausea, dizziness, frequent weak pulse are the result of anemia. When examining the abdomen, in some cases, asymmetry can be noted due to an increase in its right half. Superficial palpation makes it possible to note the resistance of the anterior abdominal wall, and in some cases protective muscle tension. Quite often there is bloating. Symptoms of peritoneal irritation are weakly positive , and when combined with damage to a hollow organ, they appear clearly. With isolated damage, the Shchetkin - Blumberg symptom becomes positive after 6-8 hours, when traumatic or biliary peritonitis begins to develop. Dullness of percussion sound in the lateral parts of the abdomen is a fairly common symptom. Phrenicus symptom, a symptom of fluid movement in the abdominal cavity, pain with jerky compression of the lower chest

(Dmitruk's symptom), pain with pressure on the lower part of the sternum and right costal arch (Khadri's symptom), according to our clinic, occur in isolated cases. Thus, with blunt abdominal trauma, it is rather difficult to recognize liver damage, however, the mechanism of injury, the presence of blood in the abdominal cavity, the clinic of shock and significant blood loss give rise to such an assumption.

With subcapsular ruptures, the clinical picture does not seem to give reason to think about damage to internal organs: slight soreness in the bruised area, sometimes a slightly enlarged liver with a painful edge on palpation. However, in such patients, after 1-3 days, the pain intensifies somewhat, the body temperature rises to subfebrile numbers, there is a slight yellowness of the sclera, which already suggests the presence subcapsular ruptures. With continued bleeding, the tension of the hematoma increases, which can lead to rupture of the capsule and emptying of the hematoma into the free abdominal cavity (biphasic rupture of the organ) [10,15].

The clinical picture of a simultaneous rupture of the pulp and capsule of the spleen is quite bright and is manifested by symptoms of intra-abdominal bleeding. Many authors note that in this pathology, as a rule, there is a short-term loss of consciousness ("primary syncope"). In addition to the usual symptoms inherent in blood loss: pallor of the skin, anxiety, frequent small pulse, lowering blood pressure, tension in the abdominal muscles in the left upper quadrant, dullness of percussion sound in the projection of the left lateral canal, one should indicate the irradiation of pain in the left shoulder and shoulder blade, (symptom "roly-poly and", pulling the testicle up on the left for) due to contraction of the muscle that raises the testicle (m. cremaster). Quite right points out [1,2]. that an increase in the size of the spleen, determined percussion, may be associated not only with a subcapsular hematoma, but also with the accumulation of blood clots between the spleen and diaphragm.

At the same time, the diagnosis of central and subcapsular hematoma is very difficult. After the "primary syncope" there comes a light interval: the pain subsides almost completely, the general state of health improves. Particular attention should be paid to the mechanism of injury. The presence of fractures of the lower ribs on the left and mild pain in the left hypochondrium radiating to the left shoulder and shoulder blade should alert

the doctor. On palpation, it is sometimes possible to palpate and percussion determine the expansion of the boundaries and the enlargement of the spleen. The duration of the light interval can last from several hours to 3-4 weeks . [7,8,19]. He pays special attention to minor symptoms that may lead the doctor to think about subserous damage to the spleen: subfebrile condition, leukocytosis, intestinal paresis, which persist from the moment of injury until the moment the capsule ruptures. [6,11,21].

In the future, among a relatively satisfactory condition, a “secondary syncope” occurs with a short-term loss of consciousness and increasing phenomena of profuse intra-abdominal bleeding. All of the above requires from medical personnel constant dynamic monitoring of patients with closed injuries of the abdomen when force is applied in the region of the left hypochondrium.

Out of 131 operated patients, in 20 (15.3 %) people with liver ruptures of IV and V degrees according to Moore, bleeding was stopped according to " Damage C control ". The effectiveness of multi-stage tactics was assessed by the level of mortality and the number of purulent-septic complications.

We analyzed the results of surgical treatment of 20 patients with massive liver injuries, aged 17 to 50 years, mean age 26 years. There were 12 men and 8 women. The average assessment of the severity of damage on the ISS scale amounted to 34 points (17-76), according to E. Mooge IV and V degrees of damage. The mean blood loss was 2850 ml (1750-3850 ml). All patients underwent multi-stage laparotomy with gauze (film) tamponade, the average number of operations per 1 person is 3 (2-5), suturing of the liver wound with tamponade (14), extensive hepatotomy and vascular ligation (3), atypical resection (2), suturing large main vessels with tamponade (1). The average bed /day in the intensive care unit is 13 (3-16), the average bed /day in the clinic is 25 (3-28). Mortality was 25.0% (5 out of 20), mainly purulent-septic complications and multiple organ failure.

Liver injuries in which a multi-stage surgical tactic of the “ damage type” type was used control ", we have qualified as follows.

Option 1 - blunt trauma to the abdomen with isolated massive liver damage and blood

loss of more than 2 liters (in 11 patients).

2nd variant - penetrating wounds of the liver with damage to the main vessels (in 4).

3rd option - combined massive damage to the hollow and parenchymal organs of the abdominal cavity (in 5).

The criteria for the use of multi-stage treatment of a severe category of victims was the presence of 3 out of 5 signs:

1- interoperative blood transfusion of 2 more liters;

2- instability of the victim;

3- hypothermia (t in the esophagus $< 34^{\circ}\text{C}$);

4- development of DIC;

5- damage to the liver and other organs with massive bleeding.

In 30 patients with injury of the liver (16) and spleen (14), according to the classification of Moore I-II degree, clear signs of intraperitoneal bleeding were noted upon admission to the clinic. In ultrasound examination, the volume of hemoperitoneum in 30 patients ranged from 200 to 450 ml. These are hemodynamically stable patients. As a result, these patients recovered without surgical treatment.

In 30 patients with liver and spleen injuries, the volume of hemoperitoneum amounted to 355.5 ± 10.0 ml. They were treated conservatively.

All patients required transfusion of cryoprecipitate of the corresponding blood group, on average, 3.5 ± 0.3 doses, 12 patients - fresh frozen plasma, 350.80 ± 55.8 ml for each patient, and 8 patients - 250.5 ± 40.0 ml of donor erythrocyte masses.

Conclusions. 1. Multi-stage surgical tactics " damage control » in isolated and combined severe liver damage is an effective method in unstable victims with a risk of developing coagulopathy and multiple organ failure. A necessary component at the final stage of surgical intervention is intestinal decompression for the purpose of enteral tube feeding to correct hypermetabolism and prevent secondary systemic complications associated with emerging enteral insufficiency.

2. Mortality among 131 patients with injuries of parenchymatous organs was 1.53%

(2 patients).

Literature:

1. Хаджибаев А. М., Мустафакулов И. Б. Современное состояние и нерешенные проблемные вопросы диагностики и тактики лечения тяжелых повреждений живота при сочетанной травме //Вестник экстренной медицины. – 2011. – №. 4. – С. 77-81.
2. Хаджибаев А. М., Мустафакулов И. Б. Современное состояние и нерешенные проблемные вопросы диагностики и тактики лечения тяжелых повреждений живота при сочетанной травме //Вестник экстренной медицины. – 2011. – №. 4. – С. 77-81.
3. Рустамов М., Муртазаев З., Дусияров М. Выбор оптимальной хирургической тактики при эхинококкозе печени //Журнал проблемы биологии и медицины. – 2015. – №. 2 (83). – С. 106-109.
4. Рузибоев С. и др. Наш опыт консервативного лечения повреждении селезенки при закрытой травме живота //Журнал вестник врача. – 2013. – Т. 1. – №. 01. – С. 131-132.
5. Нарзуллаев С. И. и др. Синдром внутрибрюшной гипертензии при сочетанных абдоминальных травмах //Journal the Coryphaeus of Science. – 2023. – Т. 5. – №. 1. – С. 211-220.
6. Мустафакулов И., Умедов Х. СИНДРОМ ВНУТРИБРЮШНОЙ ГИПЕРТЕНЗИИ ПРИ СОЧЕТАННЫХ АБДОМИНАЛЬНЫХ ТРАВМАХ //Журнал гепато-гастроэнтерологических исследований. – 2020. – Т. 1. – №. 2. – С. 52-55.
7. Мустафакулов И., Умедов Х. СИНДРОМ ВНУТРИБРЮШНОЙ ГИПЕРТЕНЗИИ ПРИ СОЧЕТАННЫХ АБДОМИНАЛЬНЫХ ТРАВМАХ //Журнал гепато-гастроэнтерологических исследований. – 2020. – Т. 1. – №. 2. – С. 52-55.
8. Мустафакулов И., Умедов Х. СОВРЕМЕННЫЕ ТАКТИЧЕСКИЕ ПОДХОДЫ В ЛЕЧЕНИИ ТРАВМАТИЧЕСКИХ ПОВРЕЖДЕНИЙ ПЕЧЕНИ //Журнал гепато-гастроэнтерологических исследований. – 2020. – Т. 1. – №. 2. – С. 48-51.
9. Мустафакулов И., Умедов Х. СОВРЕМЕННЫЕ ТАКТИЧЕСКИЕ ПОДХОДЫ В ЛЕЧЕНИИ ТРАВМАТИЧЕСКИХ ПОВРЕЖДЕНИЙ ПЕЧЕНИ //Журнал гепато-гастроэнтерологических исследований. – 2020. – Т. 1. – №. 2. – С. 48-51.

10. Мустафакулов И. и др. ТЯЖЕЛАЯ СОЧЕТАННАЯ ТРАВМА ЖИВОТА //Журнал гепато-гастроэнтерологических исследований. – 2020. – Т. 1. – №. 1. – С. 63-68.
11. Мустафакулов И. Б., Камалов Т. К., Рахматова Л. Т. Модульное обучение в подготовке специалиста с высшим сестринским образованием //Здоровье, демография, экология финно-угорских народов. – 2017. – №. 4. – С. 18-19.
12. Мустафакулов И. Б. и др. SURGICAL TACTICS IN CASE OF ISOLATED INJURIES OF SMALL AND LARGE INTESTINE //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2022. – Т. 3. – №. 2.
13. Мустафакулов И. Б. и др. SURGICAL TACTICS IN CASE OF ISOLATED INJURIES OF SMALL AND LARGE INTESTINE //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2022. – Т. 3. – №. 2.
14. МУСТАФАКУЛОВ И. Б. и др. "QO'SHMA ABDOMINAL SHIKASTLANISHLARIDA" DEMAGE CONTROL" QO'YISH TAKTIKASI //ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7. – №. 3.
15. МУСТАФАКУЛОВ И. Б. и др. "QO'SHMA ABDOMINAL SHIKASTLANISHLARIDA" DEMAGE CONTROL" QO'YISH TAKTIKASI //ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7. – №. 3.
16. Мустафакулов И. Б. и др. OPTIMIZATION OF INTENSIVE THERAPY FOR BURN SHOCK //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2021. – №. SPECIAL 1.
17. Мустафакулов И. Б. и др. OPTIMIZATION OF INTENSIVE THERAPY FOR BURN SHOCK //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2021. – №. SPECIAL 1.
18. Мустафакулов И. Б. и др. INTESTINAL INJURIES IN COMBINED ABDOMINAL TRAUMA //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2021. – №. SPECIAL 1.
19. Мустафакулов И. Б. и др. INTESTINAL INJURIES IN COMBINED ABDOMINAL TRAUMA //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2021. – №. SPECIAL 1.
20. Мустафакулов И. Б. и др. AMNIOTIC MEMBRANE-AS AN EFFECTIVE BIOLOGICAL WOUND COVERING //УЗБЕКСКИЙ МЕДИЦИНСКИЙ ЖУРНАЛ. – 2021. – №. SPECIAL 1.
21. Муртазаев З. И. и др. Выбор оптимальной хирургической тактики при эхинококкозе легких //Национальная ассоциация ученых. – 2016. – №. 3-1 (19). – С. 51-54.
22. Курбаниязов З. и др. Способ ненапряжной герниоаллопластики у больных паховой грыжей //Официальный бюллетень. – 2014. – Т. 6. – №. 158. – С. 7-8.
23. Курбаниязов З. Б. и др. Результаты хирургического лечения узловых образований щитовидной железы //Национальный хирургический конгресс совместно с XX юбилейным съездом РОЭХ. – 2017. – С. 4-7.

24. Курбаниязов З. Б. и др. Результаты хирургического лечения узловых образований щитовидной железы //Национальный хирургический конгресс совместно с XX юбилейным съездом РОЭХ. – 2017. – С. 4-7.
25. Карабаев Х. и др. Ожоговый шок: патогенез, клиника, принципы лечения //Журнал вестник врача. – 2011. – Т. 1. – №. 03. – С. 74-78.
26. Давлатов С. С., Сайдуллаев З. Я., Даминов Ф. А. Миниинвазивные вмешательства при механической желтухе опухолевого генеза периапулярной зоны //Сборник Научно-практической конференций молодых ученых СамМИ. – 2010. – Т. 2. – С. 79-80.
27. Арзиева Г. Б. и др. Исходы беременности при термической травме //Журнал Неотложная хирургия им. ИИ Джанелидзе. – 2021. – №. S1. – С. 9-9.
28. Авазов А. и др. Ожоговый шок: патогенез, клиника, принципы лечения //Журнал проблемы биологии и медицины. – 2018. – №. 4 (104). – С. 227-231.
29. АBAЗOB A. A. и др. QO'SHMA SHIKASTLANISHLARDA QORIN BO'SHLIG'I A'ZOLARINING OG'IR DARAJADAGI SHIKASTLANISHLARINI DIAGNOSTIKA VA DAVOLASHDA HAL ETILMAGAN MUAMMOLLARI //ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7. – №. 3.
30. АBAЗOB A. A. и др. QO'SHMA SHIKASTLANISHLARDA QORIN BO'SHLIG'I A'ZOLARINING OG'IR DARAJADAGI SHIKASTLANISHLARINI DIAGNOSTIKA VA DAVOLASHDA HAL ETILMAGAN MUAMMOLLARI //ЖУРНАЛ БИОМЕДИЦИНЫ И ПРАКТИКИ. – 2022. – Т. 7. – №. 3.
31. Turayevich Y. O., Saydullaev Z. Y., Daminov F. A. DETERMINATION OF THE MECHANISM OF HEMOSTATIC ACTION OF GEPROCELL IN AN EXPERIMENTAL MODEL OF HEAT INJURY //Frontline Medical Sciences and Pharmaceutical Journal. – 2022. – Т. 2. – №. 03. – С. 7-18.
32. Shakirov B. M., Avazov A. A., Umedov X. A. Peculiarities of hand burn treatment in the conditions of moist medium //ISJ Theoretical & Applied Science, 04 (108). – 2022. – С. 289-291.
33. Shakirov B. M., Avazov A. A., Umedov X. A. Peculiarities of hand burn treatment in the conditions of moist medium //ISJ Theoretical & Applied Science, 04 (108). – 2022. – С. 289-291.
34. Ruziboev S. A., Daminov F. A. OUR EXPERIENCE IN TREATMENT OF STRESS ULTRASONICS IN SEVERE BURNED //Euro-Asia Conferences. – 2021. – Т. 1. – №. 1. – С. 447-449.
35. Rakhmanov K. E. et al. Optimizatsiya gernioalloplastiki pakhovykh gryzh. – 2014.
36. Mustafakulov I. B., Khadzhibaev A. M., Mavlyanov F. S. Наш опыт хирургического лечения повреждений желудка при сочетанной травме //Клінічна анатомія та оперативна хірургія. – 2016. – Т. 15. – №. 1. – С. 71-73.

37. Mustafakulov I. B. et al. Evaluation of the effectiveness of multi-stage surgical tactics for liver damage // World journal of advance healthcare research. – 2020. – T. 4. – №. 3. – C. 264-266.
38. Mansurov T. T., Daminov F. A. LAPAROSCOPIC ADHESIOLYSIS IN TREATMENT OF ACUTE ADHESIVE INTESTINAL OBSTRUCTION // Conference Zone. – 2021. – C. 141-142.
39. Mansurov T. T., Daminov F. A. Complex Diagnosis and Treatment of Patients with Acute Adhesive Intestinal Obstruction // British Medical Journal. – 2022. – T. 2. – №. 1.
40. Mansurov T. T., Daminov F. A. ANALYSIS OF THE RESULTS OF THE POSSIBILITY OF VIDEOLAPAROSCOPY IN THE DIAGNOSTICS AND TREATMENT OF ACUTE INTESTINAL OBSTRUCTION // Art of Medicine. International Medical Scientific Journal. – 2022. – T. 2. – №. 1.
41. Alisherovich U. K., Rashidovich S. H., Ugli K. Y. E. OUR EXPERIENCE IN CONSERVATIVE TREATMENT OF SPLEEN INJURY IN CLOSED ABDOMINAL TRAUMA // Research Focus. – 2023. – T. 2. – №. 1. – C. 319-325.
42. Alisherovich U. K. et al. EVALUATION OF THE EFFECTIVENESS OF MULTI-STAGE SURGICAL TACTICS IN SEVERE LIVER DAMAGE // Research Focus. – 2023. – T. 2. – №. 1. – C. 312-318.