

COMPREHENSIVE APPROACH TO IMPROVING AUTOIMMUNE THROMBOCYTOPENIC PURPURA TREATMENT RESULTS

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ABSTRACT

This article presents the experience of leading 224 patients with autoimmune thrombocytopenic purpura (ATP). Comparative data of results of inhalation and traditional methods of treatment with glucocorticoid hormones and operative method of treatment - splenectomy (SE) are given. It has been established that the use of glucocorticosteroids (GCS) Cold metered inhalation hormones proved to be most effective in 87.2% of patients (compared to the conventional treatment method - 75.7%) and accelerated remission by 6.3 days. EC implemented by the in the early postoperative period was more effective in 96.9% of cases.

Key words: thrombocytopenia, glucocorticoids, splenectomy, complications, prevention, hormone inhalation.

INTRODUCTION

Background. Among hemorrhagic diates, one of the common forms is autoimmune thrombocytopenic purpura (ATP). [1,5-10]

The most common and pathogenetically based treatment for ATP is the use of glucocorticoid hormones. However, the use of hormones, especially their taking per os is often the cause of complications from the gastrointestinal tract. [2,3]

With prolonged use of corticosteroids, especially when taken through the mouth, given the pronounced side effects, are looking for other ways to inject corticosteroids to reduce or prevent complications of glucocorticosteroid (GCS) therapy [9,13,15]. Consequently, the improvement of both conservative and operative ATP treatment is undoubtedly has great scientific and practical interest for modern hematology and surgery. [4,11-16]

The aim of the present work is to compare the effectiveness of inhalation and traditional treatment with glucocorticoid hormones in a complex with splenectomy (SE) in patients with ATP.

Material and methods of research. In the paper the results of conservative and operational treatment of 224 patients diagnosed with ATP. Patients with chronic form of ATP was - 187, with acute form - 37. Males - 88, females - 136. Hormonal treatment. A total of 95 (42.4 per cent) patients received: 48 (men 18 (37.5 per cent) of whom received traditional treatment; Females 30 (62.5 per cent), hormone inhalation 47 patients (of whom 22 (46.8 per cent) were men, 25 (53.2 per cent) - women). SE is performed in 129 (57.6 per cent) patients with chronic ATP (of whom 40 (31.1 per cent) are men, women - 89 (68.9%). The traditional method of SE is performed in 65 (50.4%) patients, suggested by us method in 64 (49.6%).

The following are used for verification of ATP criteria (except complaints, historical and objective inspection):

1. Thrombocytopenia (platelets < 150 x 10⁹/l) In the absence of other abnormalities in the calculation of the blood cells.
2. No clinical and laboratory signs illness in next of kin.
3. Normal or increased number of megakaryocytes bone marrow.
4. No other diseases or factors capable of causing thrombocytopenia in patients.
5. The effect of corticosteroid therapy.

During SE, the amount of blood loss is determined by weighing surgical dressings - napkins, before and after surgery, and blood loss after operation from a drainage tube, infusion into the dishes with a mark. In addition, patients with ATP were given ultrasound examinations for internal organs, electrocardiography, endoscopic examination of the gastrointestinal tract.

Patients complained of hemorrhagic syndrome: petechiae and ecchymosis on the skin, nasal, uterine bleeding, bleeding from gums and gastrointestinal tract, which were more common at platelet levels < 20.5 30.0 x 10⁹/l. The age of the disease at the time of the first inpatient visit was from 3 days to 5 months for acute ATP. In the history of duration The disease ranged from 6 months to 20 years with chronic ATP and during this time patients received hormones in tablets from 2 to 10 times.

GCGs were prescribed with traditional treatment of 2-2.5mg/kg in acute form, 1-1.5mg/kg in chronic form ATP per os and parenteral. Inhalation (prednisolone and dexamethasone solution) was performed on nebulizer inhaler apparatus «Boreal», (Italian production) at a dose of 1-2.0mg/kg. Patients also received

fibrinolysis inhibitors, vascular wall protectors, biological membrane stabilizers and topical treatment in the case of nasal and gum bleeding. Patients with a severe degree of anemia were transfused erythrocyte mass.

Complications detected in 50 (52.6%) patients with ATP on the side of the digestive tract; gastroduodenitis in 21, stomach ulcer in 6, Ulcer 12 of the rectum in 5, colitis in 2, GI discomfort in 11, stomach pain in 5.

SE performed 129 patients with ATP. 64 patients of the experimental group of splenectomy was performed in the way we suggested - when auditing the spleen was evaluated her mobility and contact with the circle, detached the back its surface from parenteral peritoneal hemostasis in the direction of the leg and back of the stomach. Then the spleen was easily dislocated into the wound, starting with the lower the poles thereof were released from ligaments and bound before; two clamps were placed over the ligature, then cut between the clamps and the stump sewn. The 0.5 x 0.5 cm window was then opened in the anterior leaf of the peritoneum from the upper brisket pole and the gastro-splenic ligament was ligated by the above method. If the width of the foot is large, more tissue is taken when the poles are isolated. The front leaf of the peritoneum in the leg area is not opened, this preserves the integrity tissue and hemostasis. The next stage of the operation - preliminary ligation of the leg of the spleen with catgut over the capsule pancreas, under control of the posterior surface, so as not to damage the tail of the pancreas the glands. In this case, all the elements of the leg of the spleen are gathered in a single stem with a straight axle, which is much improves subsequent clipping over the ligature. This in turn is preventing bleeding. Subsequently, the ligature is superimposed 2-3 clamp, and the spleen is removed. The stump is bandaged and sewn. This SE prevents damage to the tail of the pancreas, creates a reliable hemostasis, and preserves the integrity of adjacent tissues.

Results of the study. Inhalation at a dose of 1.0 to 2mg/kg per day. Of 18 patients with acute ATP Clinical hematology (CGE) for 13 (72.2%) patients, on average for 6.5 bed days, clinical effect (CE) in 2 (11.1%) patients, on average for 5.5 bed days. Clinical and clinical hematological effect (C and CGE) 15 (83.3 per cent) patients, average in 6.3 bed-days. 3 (16.7%) patients suffering from the effect of treatment there was no. In patients with acute ATP receiving inhalation therapy of hormones GCS hemorrhagic syndrome began to disappear for 3-4 days, the number of platelets became rise from 5-6 days of treatment.

19 patients (adults - 9, children - 10) with acute ATP, from the first or second day of receipt together with other GC hormones (prednisolone and dexamethasone) in tablets and injections at a dose of 1.5-2.0mg/kg per day. The results of

traditional hormonal therapy in adults and children with CATI showed that 13 (68.4%) patients received CGE, with an average of 9.8 bed days. KE is obtained from 2 (10.5%) patients with an average of 16.5 bed days. K and CGE are obtained in 15 (78.9%) patients, on average in 10.7 bed days. In 4 (21.1%) patients the effect of hormonal therapy is not obtained. The hormone treatment he received was ineffective for more than three to four weeks.

Results of inhalation therapy of sick children and adults chronic form ATP (HACT). Inhalation was carried out at a dose of up to 2mg/kg per day. Of 29 patients, CGE - for 13 (44.8 per cent) patients, on average for 5.8 bed days, CE also in 13 (44.8%) Patients received an average of 7.2 bed days, 3 (10.4 per cent) - no effect. Twenty-six (89.7 per cent) patients received K and CGE treatment, with an average of 6.5 bed days. Starting from 2 and 4 days, all patients with hemorrhagic syndrome are suppressed.

29 patients with HACT (9 children, 20 adults) received traditional treatment, including as pathogenetic therapy of HC hormones at a dose of 1.0-1.5mg/kg per day. From traditional GC hormone treatment to sick children and adults HACT received CGE 6 (20.7 per cent) of patients, with an average of 9.3 bed-days. Clinical remission (KR) in 15 (51.7%) patients, on average for 11.2 bed-days. K and KSR received in 21 (72.4 per cent) patients with an average of 10.7 bed days, 8 (27.6 per cent) patients were without effect with the persistence of hemorrhagic syndrome. Hemorrhagic syndromes began to disappear from 3-5 days in patients with remission. Thus: 47 Patients; APTA and HACT received dosed cold GCS hormone inhalation, with CT and CGR patients receiving 83.3% on average in 6.3 days, compared to 78.9% for traditional treatments and 10.7 days. In patients, HACT K and CGR received from 89.7% of patients, at 6.5 days, as opposed to 72.4% and 10.7 days. Of the 47 patients who received inhalation treatment, 26 (55.3%) had inhalation therapy, on average 6.1% bed days received by the CGE, 15 (31.9%), average 7.0 bed days or 41 (87.2%) patients, average K and CGE received in 6.3 bed-days. 6 (12.8%) patients have no effect, they have left skin hemorrhagic diseases manifested in the form of ecchymosis.

Results of splenectomy at ATP. For 2000-2002. 65 (50.4 per cent) patients with HITP were operated on in the usual way: children - 37 (56.9 per cent), adults - 28 (43.1%). Total blood loss was 7980 ml or one patient 122.8 ml. During the operation, only 5590 ml of STD and 9715 ml of erythrocyte mass were transfused. Total blood components transfused 15305 ml or per one patient 235.5 ml. Such complication as damage to the pancreas during surgery was observed in 12 (18.5%) patients. After surgery on the 1st and 2nd day 4 (6.2%). Fever increased to 38.0 and in 3 (4.6%) patients had complaints on the 2nd day after the operation pain

in the left abdomen and lumbar region. From the drainage tube, hemorrhagic discharge was in the 1st and 2nd days up to 100.0 ml or more. In 50% of patients drainage tube removed on the 1st day after surgery. Relaparotomy about internal bleeding after SE was conducted in 2 (3.1%) patients. The nearest postoperative results in patients with chronic ATP K and CGD accounted for 91.6% of patients. The proposed method is performed SE 64 patients with chronic ATP by current. Total blood loss is 4915 ml or per patient 76.8 ml. During surgery y 3 (4.7 per cent) The caudal portion of the pancreas was damaged in the catgut ligature, but no pancreatitis clinic was observed in the postoperative period. After hemorrhagic excretion operations from the drainage tube were up to 30 ml. The nearest postoperative results in ATP patients with chronic K and CGD 96.9% of patients had drainage tubes removed in 90% of cases on the 1st day after the operation. There were no complications during and after the operation.

Outcome discussion

Thus, inhalation method of administration of hormones in dosed cold form on nebulizer apparatus «Boreal» patients with acute and chronic current ATP results are as good as traditional treatment with oral and parenteral HC and has such benefits as; no complications from inhalation, good tolerance procedure, especially, children; prevention of neurosis, hysteria, pain syndrome associated with manipulation of GCS hormones in children; absence of withdrawal syndrome; prevention of hit parenteral infection; economic efficiency by reducing the amount of GC hormones, blood components, other drugs and reducing the number of bed days. In comparative terms with traditional treatment, acute ATP at 4.4, chronic ATP at 4.2 he's been in remission for days.

The proposed method - allows preserving the integrity of adjacent tissues prevents damage to the tail of the pancreas and prevents bleeding during and after surgery. This being the case reduces the duration of surgery by 10-15 minutes, bleeding during surgery is reduced by 45.7 ml in one patient, and after surgery 2-3 times. Postoperative pancreatitis, relaparotomy and lethal results are not observed. Saves red blood mass, blood components and other drugs.

Findings.

1. Inhalation of hormones in dosed cold form on nebulizer apparatus «Boreal» patients with acute and chronic forms of ATP - an alternative to the existing traditional method of conservative treatment. From inhalation of HC, in comparison with traditional acute treatment ATP form at 4.4, with chronic ATP form at 4.2 beds earlier received remission. It warns against a number of complications of GPS therapy and transmission of parenteral blood transmissible infection.

2. Inhalation of GHS hormones in case of illness ATP is shown especially in children and people with gastrointestinal disease. Contraindicated in patients with a severe general condition on the background the main disease and their intolerance to inhalation of GHS.

3. The improved splenectomy method is less traumatic, with a lighter postoperative flow, less blood loss and a minimal number of complications.

4. The proposed procedure reduces pancreatic damage by more than 4 times and thus prevents the development of postoperative pancreatitis. Reduces surgery time by 10-15 minutes. A good result in the immediate postoperative period, after splenectomy, was 96.9% (with traditional treatment 91.6%).

REFERENCES

1. Altybaev U.A. Trombocitopenicheskaya purpura v Uzbekskoj SSR: Avtoref. dis. ... kand. med. nauk. — M., 1984. — 25 s. Altybaev U.A. Thrombocytopenic purpura in the Uzbek SSR: Abstract of the thesis. dis. ... cand. Med. Sciences. - M., 1984. - 25 p.

2. Cines D.B., Cuker A., Semple J.W. Pathogenesis of immune thrombocytopenia. *PresseMed.* 2014; 43 (4 Pt2): e49–59. doi:10.1016/j. lpm. 2014.01.010.

3. Ergashev U.Y. et al. Treatment of idiopathic thrombocytopenic purpura: prevention of hormonal complications in the stomach and duodenum // *Central Asian Journal of Medicine.* — 2020. — T. 2020. — №. 2. — C. 5–28.

4. Ergashev U. Y., Abdusalomov B. A., Minavarkhojayev R. R., Ortiqboyev F.D., & Malikov N. M. (2023). Evaluation of the pathomorphology of regeneration in diabetic foot syndrome and determination of its dependence on biochemical processes. *World Bulletin of Public Health*, 19, 66-78.

5. Grzhimolovskij A.V. Laparoskopicheskaya splenektomiya u gematologicheskix bol'nyh: Avtoref. dis... kand. med. nauk. — M., 2004. —25 s. Grjimolovsky A.V. Laparoscopic splenectomy in hematological patients: Abstract of the thesis. dis... cand. med. Sciences. - M., 2004. -25 p.

6. Hand-assisted laparoscopic splenectomy: indications and technique // *Bermas H., Fenoglio M.E., Haun W., Moore J.T. //JSLS.* — 2004. — vol. 8910. — P. 69–71.

7. Ismoilov F.M. DIAGNOSTIKA I LECHENIE BOL'NYH S OSTROJ KISHECHNOJ NEPROHODIMOST'YU. Zbiór artykułów naukowych recenzowanych., 69.

8. Kato A. Disorders associated with autoimmune thrombocytopenic purpura // *Nippon Rinsho.* — 2003. — vol. 61. —P. 604–608.

9. Mustafakulov G. I., Atahodzhaeva F. A., & Ergashev U. YU. (2020). Idiopaticheskaya trombocitopenicheskaya purpura pri beremennosti.

10. Mustafakulov G. I., Ergashev U. Y., Atakhodjaeva F. A., & Anvarhodjaeva S. G. (2022). Simultaneous surgeries in chronic immune thrombocytopenia.
11. Mustafakulov G.I. et al. Splenectomy for hairy cell leukemia //Central Asian Journal of Medicine. — 2021. — T. 2021. — №. 4. — C. 160–167.
12. Raimkulova N. R., & Usmonbekova G. U. (2017). Nefroprotektivnoe dejstvie statinov u bol'nyh s hronicheskim glomerulonefritom. Molodoj uchenyj, (8), 131-133.
13. Splenektomiya transtorakal'nym dostupom / SHavlohov V.S., Karagyulyan S.R., Efimov I.V. i dr. // Gematologiya i transfuziologiya. — 2007. t. 52, №5. — S. 50–54.
14. Vorob'ev A.I. Rukovodstvo po gematologii. — Moskva izd-vo «N'yudiamed», 2005. —31–35 s.
15. Vybor sposoba splenektomii pri zabolevaniyah sistemy krovi /Karagyulyan S. R., Grzhimolovskij A. V., Danishyan K.I., SHavlohov V.S. i dr. // Gematologiya i transfuziologiya. — 2007. — t. 52, №1. — S. 3–10.
16. Yusufjanovich E. U. (2023). Management of Patients with Acute Arterial Ischemia of the Lower Limb. International Journal of Scientific Trends, 2(2), 43-48.