cer treatment, when surgical methods are not applicable. For us lung hemorrhage is a contraindication for chemo-radiotherapy. All the above mentioned methods allow REVEPA as a perspective method of palliative treatment of malignant lung cancer, especially when combined with chemodrugs intra-arterial injection. Recanalization and restoration of the bronchial airway was achieved in all the patients.

Performing endoscopic recanalization of tumor stenosis is a positive moment in the treatment of extensive disease lung cancer. A recanalized part of stenosis helps eliminating inflammatory changes in the bronchial tree, reducing toxicity in the organism along with respiratory functions. All these factors allowed the patients to undergo subsequent radiation and chemotherapy. Tumor relapse, recurrence of stenosis and pulmonary bleeding had not been observed during the first 5 months.

Thus, the first experience of palliative treatment for extensive disease lung cancer allows to make the following conclusions:

1. REVEBA allows to achieve stable haemostasis in most patients with extensive disease lung cancer.

2. Application of endoscopic recanalization of malignant stenosis can improve the quality of life of patients.

3. The use of palliative methods in complicated forms of lung cancer requires further clinical studies.

REFERENCES

1. *Химиоэмболизация* бронхиальных артерий у больных раком легкого, осложненным легочным кровотечением / В. В. Бойко, Ю. В. Авдосьев, А. Г. Краснояружский, А. Б. Старикова // Онкология. – 2008. – Т. 10. – № 3. – С. 350–352.

2. *Bronchial* artery empolisation for acute massive hacmoptysis: retroscpective study / L. F. Cheng, E. P. Y. Fung, T. Y. W. Hom [et al.] // I. H. K. Coll. Radiol. – 2005. – Vol. 8. – P. 15–19.

3. *Bronchial* artery empolisation for hemoptysis due to bening disease: immediate and long term results / A. Kato, S. Kuclo, U. Matsunoto [et al.] // Cardiovasc. Intervent. Radiol. – 2000. – Vol. 23. – P. 351–352.

4. *Multidisciplinary* treatment of life-threatening massive hemoptysis: a 10 year experience / N. Shigemura, I. Y. Wan, S. C. Yu [et al.] // Ann. Thorac. Surg. – 2009. – Vol. 87. – P. 849–853.

5. *Bronchial* artery embolisation: experience with 54 patients / K. L. Swanson, M. Jonhson, U. B. S. Prakash [et al.] // Chest. – 2002. – Vol. 121. – P. 789–795.

6. *Bronchial* and nonbronchial systemic artery embolisation for life-treatment hemoptysis: a comprehensive review / W. Yoon, J. K. Kim, Y. H. Kim [et al.] // Radiografics. – 2002. – Vol. 22. – P. 1395–1409.

7. *Palliative* management of malignant airway obstruction / C. D. Morris, J. M. Dudde, K. Godette [et al.] // Ann. Thorac. Surg. – 2002. – Vol. 74. – P. 1928–1933.

REFERENCES

1. Boiko V.V., Avdosyev Yu.V., Krasnoyaruzhskiy A.G., Starikova A. B. Chemoembolization of bronchial arteries in patients suffering from lung cancer complicated with lung bleeding. *Onkologia* 2008; 10(3): 350-352.

2. Cheng L.F., Fung E.P.Y., Hom T.Y.W. et. al. Bronchial artery empolisation for acute massive hacmoptysis: retroscpective study *I. H. K.* Coll. *Radiol.* 2005; 8: 15-19.

3. Kato A., Kuclo S., Matsunoto U. et al. Bronchial artery empolisation for hemoptysis due to bening disease: immediate and long term results. *Cardiovasc. Intervent. Radiol* 2000; 23: 351-352.

4. Shigemura N., Wan I.Y., Yu S.C., et al. Multidisciplinary treatment of life-threatening massive hemoptysis: a 10 year experience *Ann. Thorac. Surg*. 2009; 87: 849-853.

5. Swanson K.L., Jonhson M., Prakash U.B.S., et al. Bronchial artery embolisation: experience with 54 patients. *Chest* 2002; 121: 789-795.

6. Yoon W., Kim J. K., Kim Y. H. et al. Bronchial and nonbronchial systemic artery embolisation for life- treatment hemoptysis: a comprehensive review. *Radiografics* 2002; 22: 1395-1409.

7. Palliative management of malignant airway obstruction / C. D. Morris, J. M. Dudde, K. Godette et al. *Ann. Thorac. Surg* 2002; 74: 1928-1933.

Submitted 12.07.2012

UDC 616.149-008.341.1:347.440.32

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COMPLEX TREATMENT OF PATIENTS WITH CIRRHOSIS COMPLICATED BY VARICEAL BLEEDING

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УДК 616.149-008.341.1:347.440.32

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КОМПЛЕКСНОЕ ЛЕЧЕНИЕ БОЛЬНЫХ С ЦИРРОЗОМ ПЕЧЕНИ, ОСЛОЖНЕННЫМ КРОВОТЕЧЕНИЕМ

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В этой статье мы проанализировали наш опыт лечения пациентов с портальной гипертензией, осложненной кровотечениями из варикозно расширенных вен. С 2006 по 2012 гг. под нашим

наблюдением было 390 пациентов с циррозом, осложненным кровотечением из варикозно расширенных вен. Из 296 пациентов, которым мы выполняли эндоскопический гемостаз, 158 больным выполняли эндоскопическую склеротерапию, 98 — эндоскопическое лигирование и 40 — прошивание через стенку желудка. После остановки кровотечения и стабилизации состояния пациентов в 82 случаях для профилактики рецидивов кровотечений мы выполняли эндоваскулярную эмболизацию селезеночной артерии по методике, модифицированной нами. В 52 случаях для профилактики рецидивов кровотечений мы выполняли лапароскопические операции портоазигального разобщения с коагуляцией и клипированием сосудов желудка. Эндоваскулярная эмболизация и лапароскопическая деваскуляризация сосудов желудка и нижней трети пищевода позволили значительно сократить частоту рецидивов кровотечений и летальность у этой тяжелой категории больных в ближайшем и отдаленном периодах.

Ключевые слова: варикозное кровотечение, эндоскопическое клипирование, эндоваскулярная эмболизация, эндоскопическое лигирование.

UDC 616.149-008.341.1: 347.440.32

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COMPLEX TREATMENT OF PATIENTS WITH CIRRHOSIS COMPLICATED BY VARICEAL BLEEDING

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This article deals with analysis of own experience of treatment of portal hypertension patients complicated with variceal bleeding. There were 390 patients with cirrhosis complicated with variceal bleeding under our supervision from 2006 to 2012. Endoscopic hemostasis was carried out in 296 patients, 158 patients of them were conducted endoscopic sclerotherapy, 98 — endoscopic clipping and ligation and 40 patients — endoscopic sealing. After a stop of bleeding and stabilization of patient condition in 82 cases for prevention of recurrence of bleedings we carried out endovascular embolization of a splenic artery by the technique which we elaborated ourselves. In 52 cases for the purpose of bleedings recurrence prevention we performed laparoscopic operations which consisted in coagulation and ligation of short veins and stomach arteries on big curvature. The remote results after only an endoscopic hemostasis, and an endoscopic hemostasis with the subsequent performance of laparoscopic and endovascular operations have been observed in 190 patients during 3 years. The most effective method of a local hemostasis is the endoscopic ligation and clipping of varices. Endovascular embolization of the splenic artery and also a laparoscopic devascularization of cardiac part of the stomach and abdominal part of the esophagus allows to reduce considerably frequency of bleedings recurrence and lethality in the remote period.

Key words: variceal bleeding, endoscopic clipping, endovascular embolization, endoscopic ligation.

Actuality

Treatment of the complicated portal hypertension is one of the most actual, complex and unresolved problems of surgery. For the last decades growth of cirrhosis incidence is the most frequent reason of portal hypertension worldwide. According to World Health Organization (WHO) the lethality from cirrhosis takes the eighth place among diseases of the digestive system [4]. Many authors consider that these unfortunate trends are caused with growth of alcohol consumption, increase in incidence of viral hepatitis, increase in quantity of consumed drugs, insufficient knowledge of problems of liver diseases pathogenesis. The most dangerous and difficult task is to predict such complication of portal hypertension as bleeding from oesophageal and gastric varices. The recurrence rate of the first bleeding within first 2 years after statement of the diagnosis makes 30%, and lethality at the first bleeding is 50% [1; 3].

The worst prognosis for those patients who had suffered bleeding before.

Bleeding recurrence rate makes 50–90% [2]. So high risk and low survival rate define need in improvement of treatment management at oesophageal and gastric varices in patients with portal hypertension which should be based on knowledge and the differentiated approach to treatment of this category of patients. Poor survivability of patients with cirrhosis at complex operations always dictated need of search and improvement of mini-invasive methods of treatment. One of the most important mini-invasive methods of treatment of this category of patients is connected with endoscopic procedures. Medical tactics at bleedings in patients with portal hypertension is ambiguous and far from consensus. The lethality both at conservative, and at surgical treatment is high and makes 17–45% at the stage of decompensation (Child-Pugh C). Results of surgical treatment substantially depend on a functional condition of the liver [4].

Scientific publications of many authors showed that endoscopic techniques should be used not only as a bleeding stop, but also for prevention of possible recurrence of bleeding from esophageal and stomach veins [1–4].

Rapid development of laparoscopic and endovascular operative techniques allows to hope that laparoscopic operations will allow to find a better standard in operative treatment of portal hypertension and the related complications as they combine a low traumatic rate and possibility to influence the main stages of this syndrome pathogenesis. A particular interest is represented by remote results of application of these low-invasive operations.

The aim of this work was to trace and analyze the remote results of operative treatment of

patients with portal hypertension complicated by variceal bleeding with methods of a laparoscopic devascularization of the esophagus and the stomach and a X-ray endovascular selective embolization of the splenic and left gastric artery in various terms after endoscopic haemostasis.

Methods and Materials

From 2006 to 2012 there were 390 patients under our supervision: 180 patients — with cirrhosis caused by viral hepatitis was and 210 patients — with cirrhosis of alcoholic and other ethiology. Severity of the cirrhotic process was estimated by the Child-Pugh score [4]. 140 patients were with the stage of cirrhosis Child-Pugh A, 150 patients — Child-Pugh B, 100 patients — Child-Pugh C. Severe bleeding took place in 106 cases, average — 191 cases, mild — 93 patients.

All the patients who arrived in the clinic, were hospitalized to the resuscitation unit where their state was stabilized. After stabilization of the condition we made endoscopic gastroscopy with subsequent endoscopic hemostasis. The basic moment of the diagnostic stage of endoscopy is differential diagnosis of gastric or oesophageal bleeding. Process of observation was carried out with the main end which creates conditions for moving blood to a distal part of the stomach and facilitates the observation of cardiac and subcardiac part of the stomach at inversion, and also promotes blood clots washing from esophagus and stomach. In some cases we used a gastroscope with working channel of big diameter or a gastroscope with two working channels, which allows to more effectively remove blood and clots from the oesophagus. 94 patients were carried out only conservative therapy. 296 patients were carried out an endoscopic hemostasis. For venous bleeding stoppage we used endoscopical ligation, sclerotherapy and endosealing.

Of 296 patients who were performed endoscopic hemostasis, 158 patients were conducted endoscopic sclerotherapy, 98 patients — endoscopic clipping and ligation, and 40 patients — endoscopic sealing.

After a stoppage of bleeding and stabilization of condition we carried out an endovascular embolization of the splenic artery by own modified technique in 82 cases for prevention of recurrence of bleedings. Embolization of the splenic artery in all patients we carried out according to the technique of “a chronic embolization”, that is 30–40 emboli from foam rubber in diameter of 2 mm with the subsequent introduction of a cone-shaped spiral such as Gianturco with diameter of rounds from 12 to 4 mm. In all cases the embolization was carried out by consecutive introduction in the initial department at level of an origin of the left gastric artery with overlapping of its gleam. In 5 patients because of impossibility of performance of an occlusion in initial part because of anatomic features, the embolization of the splenic artery in an average third was accompanied by a selective embolization left gastric artery 25–30 foam rubber emboli. After intervention the catheter was removed from the arterial course, the pressing bandage was imposed on the place of the puncture. For days patients kept rest cure and received conservative therapy under the conditions of resuscitation unit. All the patients received wide spectrum antibiotics with a preventive purpose not less than 7 days long after intervention.

In 52 cases for the purpose of bleedings recurrence prevention we performed laparoscopic operations which consisted in coagulation and ligation of short veins and stomach arteries on big curvature. Then there was carried out an obligatory clipping or ligation of the left gastric artery and a vein. The visible dilated veins of cardioesophageal transition were stitched and alloyed. All the patients received a course of hepatotrophic and haemostatic therapy according to international WHO protocols.

Results

Of 94 cases after the use of conservative therapy with the purpose only to stop bleeding we reached positive results in 56 (59%) cases. We observed bleeding recurrence in 38 (41%) cases, lethality was 37 (39%) cases.

Different techniques of local endoscopic hemostasis were applied in 296 cases. It was possible to effectively stop bleeding in 240 (81%) cases. The lethality due to inefficiency of local hemostasis was observed in 52 (17.5%) patients.

After an endoscopic stoppage of bleeding and stabilization of condition for bleeding recurrence prevention there were preformed the laparoscopic devascularization of the cardiac part of the stomach in 52 cases and the abdominal part of the esophagus. In 1 case we needed to execute conversion in connection with bleeding at devascularization of the cardiac department of the stomach. Bleeding was associated with pronounced coagulopathy as a result of decompensated liver function. We observed the following early postoperative complications: 3 cases of troacar punctures suppuration, 1 case of subdiaphragmatic abscess, which needed a subsequent puncture, drainage and sanitation under US control, 1 case of pneumonia. There was no lethality after performance of laparoscopic devascularization.

74 patients, who were executed the endoscopic local hemostasis, after stabilization of a condition the endovascular partial embolization of the splenic artery and the left gastric artery was carried out. There was also no lethality after performance of endovascular operations. We observed only local complications — small hypodermic hematomas at the zone of the puncture of a femoral artery in 32 patients. 5 patients, who were executed embolization as a total occlusion, suffered from pronounced pain syndrome which demanded the numerous use of narcotic analgetics. In peripheral blood they developed polycythemia, which

was characteristic for devascularization of the spleen. In all three cases bleeding stopped as a result of repeated endoscopic ligation and conservative therapy. Within two weeks after intervention patients had fever from 37.5 to 39.0°C.

We observed 190 patients with remote results after only an endoscopic hemostasis, and an endoscopic hemostasis with the subsequent performance of laparoscopic and endovascular operations for 3 years. All the patients were divided into 3 groups.

The first group: results of treatment of 50 patients who were performed the endovascular embolization of the splenic and left gastric artery. Of them 5 patients died in different terms after operation: 3 patients — as a result of progressing hepatic insufficiency and 2 — because of bleeding.

The second group: results of treatment of 36 patients who were carried out laparoscopic operations — a devascularization of the cardiac part of the stomach and an abdominal part of the esophagus. In this group 1 patient died of hepatic insufficiency in 1.5 years after operation.

The third group involved results of treatment of 104 patients who were performed only endoscopic hemostasis and conservative therapy. Recurrence of bleeding was observed in 39 patients, 23 of which died of bleeding and progressing hepatic insufficiency.

Analysing the obtained results it should be noted that the endoscopic local hemostasis allows to stop effectively bleeding from varicose and expanded veins of the esophagus and the stomach, and endovascular and laparoscopic operations allow also to reduce bleedings recurrence and lethality in the remote period.

Conclusions

1. The endoscopic local hemostasis is an effective method that allows to stop variceal bleeding in patients with cirrhosis and to decrease lethality almost 2 times.

2. The most effective method of a local hemostasis is the endoscopic ligation and clipping of varices.

3. Endovascular embolization of the splenic artery and also a laparoscopic devascularization of cardiac part of the stomach and abdominal part of the esophagus allows to reduce considerably frequency of recurrence of bleedings and lethality in the remote period.

REFERENCES

1. *Декомпенсований* цироз печінки / В. І. Русин, В. О. Сипливий, А. В. Русин [та ін.]. – Ужгород : ВЕТА — Закарпаття, 2006. – 148 с.

2. *Abraldes J. G.* The management of portal hypertension / J. G. Abraldes, B. Angermayr, J. Bosch // Clin Liver Dis. – 2005. – N 9. – P. 685–713.

3. *Endoscopic* sclerotherapy versus variceal ligation in the long-term management of patients with cirrhosis after variceal bleeding: A prospective randomized study / A. Avgerinos, A. Armonis, S. Manolakopoulos [et al.] // J. Hepatol. – 1997. – N 26. – P. 1034–1041.

4. *Transection* of the oesophagus for bleeding oesophageal varices / R. N. Pugh, I. M. Murray-Lyon, J. L. Dawson [et al.] // The British journal of surgery. – 1973. – Vol. 60 (8). – P. 646–649.

REFERENCES

1. Rusin V. I., Syplyvyy V. O., Rusin A. V., Beresnyev O. V., Rumyantsev K. Ye. Decompensated cerrhosis of the liver. Uzhgorod. VETA. Zakarpattya, 2006: 148 p.

2. Abraldes J. G., Angermayr B., Bosch J. The management of portal hypertension. *Clin Liver Dis.* 2005; 9: 685-713.

3. Avgerinos A., Armonis A., Manolakopoulos S. et al. Endoscopic sclerotherapy versus variceal ligation in the long-term management of patients with cirrhosis after variceal bleeding: A prospective randomized study. *J Hepatol.* 1997; 26: 1034-1041.

4. Pugh R.N., Murray-Lyon I.M., Dawson J.L., Pietroni M.C., Williams R. Transection of the oesophagus for bleeding oesophageal varices. *The British Journal of Surgery* 1973; 60(8): 646-9.

Submitted 10.10.2012

УДК 616-056.52:616-0089:616-02-053.2/6

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ОСОБЕННОСТИ УРОВНЯ С-ПЕПТИДА У ДЕТЕЙ С ИЗБЫТОЧНОЙ МАССОЙ ТЕЛА И ОЖИРЕНИЕМ

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УДК 616-056.52:616-0089:616-02-053.2/6
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ОСОБЕННОСТИ УРОВНЯ С-ПЕПТИДА У ДЕТЕЙ С ИЗБЫТОЧНОЙ МАССОЙ ТЕЛА И ОЖИРЕНИЕМ

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Изучено содержание С-пептида в зависимости от возраста, пола и длительности наличия ИзбМТ и ожирения у детей и подростков. Установлено, что нарушение углеводного обмена, проявляющееся в патологическом увеличении уровня С-пептида уже у детей с ИзбМТ требует проведения лечебных мероприятий.

Ключевые слова: дети, избыточная масса тела, ожирение, С-пептид.