INTERACTION SIMULATION OF GASTROENTEROLOGISTS, Endoscopists and Surgeons, as the Present and Future of High-Technologic Gastroenterology of Chuvashia
(based on experience of the Republican Gastroenterologic centre of BI "Republican Clinical Hospital")

Republican Clinical Hospital, Cheboksary

According to the views of the experts of the World Health Organization, in the middle of the XXI century the diseases of the digestive system as well as cardiovascular diseases will occupy a leading position in the structure of the population morbidity. The lifestyle of a modern man (stress, unbalanced diet, lack of exercise) predisposes to an increase of digestive diseases (chronic pancreatitis, non-alcoholic fatty liver disease, inflammatory bowel disease, and others.). In the fight against them in modern gastroenterology in a relatively short period of time many diagnostic and therapeutic technologies radically changed, and visual verification of the diagnosis and monitoring of the state of the digestive organs became impossible without the cooperation of the gastroenterologist, endoscopist and surgeon. Such a model shows the work of specialists of the Republican Center of Gastroenterology BI "Republican Clinical Hospital".

In 2006, on the basis of BI "Republican Clinical Hospital" Republican Gastroenterological Center (henceforth Gastrotsentr) was created (the order of the Health Ministry of Chuvashia on June 25, 2006 № 297 "On creation of Republican Center of Gastroenterology Department of Ministry of Health and Social Development of the Chuvash Republic"). The main objectives of the creation were: the improvement of the organization and the quality of treatment and diagnostic care to patients with gastroenterological profile, organization of educational and methodological base for physicians and nurses, as well as the introduction of the new methods of diagnosis and treatment of diseases of the digestive system into medical practice.

For the integration of medical and surgical gastroenterology the following departments were included in the Gastrotsentr: gastroenterology and surgery departments, which is carried out with the cooperation of all diagnostic structures BI "Republican Clinical Hospital". In accordance with the order of the Health Ministry of Chuvashia "On improvement of medical care to adult population of the Chuvash Republic in diseases of the gastroenterological profile" from 17.08.2012 №1138 advisory reception of gastroenterological patients is carried out in two specialized clinics offices of BI "Republican Clinical Hospital".

Currently Gastrotsentr is a branch engaged in both specialized and high-tech and gastroenterological gastro-surgical help. One of the priorities of the therapeutic component of Gastrotsentr is diagnosis and treatment of diseases of the colon, the prevalence of which the Russian Federation is significant, reaching 32 cases per 10 thousand of the population. The patients with diverticular disease, ischemic bowel disease, inflammatory bowel disease (IBD) (ulcerative colitis and Crohn's disease) need timely diagnosis using current regimens and regular and endoscopic ultrasound monitoring to prevent transformation into colorectal cancer.

Over the years of the work of Gastrotsentr quality medical care was received by 3425 patients with diseases of the colon. The Republican register of patients with IBD, a leading specialist of Gastrotsentr consists of 231 patients with varying degrees of activity and severity of immune intestinal lesions and is annually updated with new cases detection. The number of treated patients with IBD in Gastrotsentr in the last 5 years has increased by 45%. The gastroenterologists of the Center use proficient techniques of genetic engineering of biological or anti-cytokine therapy. The application of anticytokine drugs for Crohn's disease
and ulcerative colitis can achieve rapid effect already in the second week of the treatment, and subsequently at maintenance therapy the sustained remission can be achieved.

In 2012, in the framework of the modernization of the health of the Chuvash Republic the Gastrotsentr was equipped with modern gas analyzer system Laktofan designed to diagnose the syndrome of bacterial overgrowth in the gut, as well as congenital and acquired fermentopathia in children and adults.

One of the new aspects of the work of the Gastrotsentr is management of patients with cirrhosis of different etiology and prevention of complications of portal hypertension syndrome. Innovative directions are ligation and stenting of varicose veins of the esophagus and stomach, which have been tested and actively used since 2012.

Despite the downward trend (by 7% over the last 3 years), the prevalence of liver disease in Chuvashia remains high, and in 2012 was 6.8 per 1 thousand of the population. In the structure of liver diseases patients with fibrosis and cirrhosis take the lion's share.

The uniqueness of the activity of the Gastrotsentr is the continuity of management of patients with liver pathology between gastroenterologists and surgeons that allows the introduction of new methods of diagnosis and treatment of the most complex diseases. The high level of anesthetic and intensive care service in BI "Republican Clinical Hospital" contributes to this. The experience over the last few years of the surgery of the liver, extrahepatic and intrahepatic bile ducts and the great vessels will significantly increase the number of high-tech operations on the liver: shunt operations in portal hypertension, extensive anatomical liver resection (right-sided and left-sided hemihepatectomy), anatomic liver resection (left-handed lobectomy, segmentectomy), anatomic liver resection for tumors of Klatskin, pretumor laparoscopic liver resection. The number of high-tech operations in the liver in the past 3 years has increased by 67%. For the separation of the liver parenchyma during anatomic resections monopolar electrocautery techniques with advanced irrigation zone resection of 0.9% sodium chloride solution and liver vascular isolation, selective endovascular embolization of feeding vessels in the liver hemangiomas are introduced by the surgeons of the Gastrotsentr.

In accordance with the order of the Health Ministry of Chuvashia "On improvement of medical care for patients with chronic pancreatitis, accompanied by intraductal hypertension" from 05.06.2008 №446, initiated by the Gastrotsentr staff, the management of the patients with chronic pancreatitis complicated by intraductal hypertension, starting with outpatient care and finishing stationary specialized and high-tech help is improved. The model management of patients with severe chronic pancreatitis options used by experts of the Gastrotsentr includes modern methods of detoxification, antioxidant and anti-cytokine therapy in the combination with microgranulated and micropiled high-dosed enzyme medications and surgical correction in case of complications. Currently, the surgeons of the Gastrotsentr are ready to provide high-tech help in diseases of the pancreas, using modern methods of correction:

- intraparenchymal internal drainage of the common bile duct in chronic pancreatitis complicated with obstructive jaundice;
- pylorokeeping pancreatoduodenectomy resection on the tumors of the pancreatic head.

The drainage operations in chronic pancreatitis - longitudinal pancreatojejunostomy (operation on Puestow) are successfully used. The methodology of duodenokeeping pancreatic head resection (surgery on Frey, isolated resection of the pancreatic head as described in E.I. Galperin) is introduced. Since 2011 the techniques of precision biliodigestive anastomosis are widely used.

The logical co-argument of the model is the activity of endoscopic services of BI "Republican Clinical Hospital". In 2012, the technique of endoscopic retrograde cholangiopancreatography, which projects the prospect of papillosphincterotomy and endoscopic lithotripsy and bile duct endoprosthesis was introduced and repeatedly tested. These medical technologies are the most popular today and the basis for the future development direction of endosurgical correction bile ducts.

As part of the research the experts of the Gastrotsentr actively participated in a multicenter study of the Russian "VIA APIA" - restoration of the quality of life of the patients with gastroesophageal reflux disease, under the auspices of the Research Institute of Gastroenterology (Moscow), along with the leading clinics of Ryazan, Tver, Kazan and Saransk. The results formed the basis of the standards of diagnosis and treatment of acid diseases (4-e Moscow Agreement, 2011). The studies of dietary habits of the population of
the republic and the microelement disbalance in patients with disorders of the digestive system were the basis of guidelines: "Nutrition habits of patients with peptic ulcer in the Chuvash Republic", "Organization and promotion of diet in the Chuvash Republic," which are introduced into the work of the health centers and gastroschools of the Chuvash Republic. The employees of the Gastrotsentr actively popularize a healthy lifestyle in the framework of the School of Health and in the mass media. Over the past 3 years 67 articles devoted to the diagnosis and treatment of diseases of the digestive system, in international, Russian and republican brochures, newspapers and magazines have been published, including 18 in reviewed Russian journals. A regular participation in Russian and international congresses and conventions allows the professionals of the Gastrotsentr to improve their professional skills and learn new techniques.

The employees of the Gastrotsentr are highly qualified professionals, who consider their main aspect of their professional activities, not only competence, but a thoughtful, kind and caring attitude to each patient who seek medical help.

The appointment for a consultative reception of patients to the specialists of the Republican Center of Gastroenterology is conducted by phone 58-21-08, or by the personal coming at the reception desk of the consultative polyclinic №1 BI "Republican Clinical Hospital" of the Health Ministry of Chuvashia daily, except Saturdays and Sundays, as well as through e-registry (http://www.med.cap.ru).

**INFORMATION ABOUT THE AUTHOR:**
Tarasova Larisa Vladimirovna
head of the gastroenterologic department of BI "Republican Clinical Hospital" Health Ministry of Chuvashia, Doctor of Medicine

**Correspondence address:**
Moskovsky pr., 9, Cheboksary, Chuvash Republic, 428018
Tel.:+7 (8352) 58-23-01
E-mail: iprkb@medinform.su