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The Analysis of the Patient's Condition after Liver Transplantation in the Republic of Sakha (Yakutia)

ABSTRACT

Clinical records of 21 patients aged 27-57 years who were on hospital treatment after liver transplantation in Therapy Department of the "No.1 Republican Hospital - National Centre of Medicine" State-Financed Institution of the Republic of Sakha (Yakutia) in 2004-2015 are analyzed. Transplantation is carried out in stages of decompensation of cirrhosis of non-viral and viral etiology. Early performed surgery increases life time of patients and improves the quality of their life.

Keywords: cirrhosis, liver transplantation, immunoreduction therapy, preventive care

INTRODUCTION

In the Republic of Sakha (Yakutia) according to Goskomstat the prevalence of liver and gall bladder diseases in general exceed similar indicators of the Far East Federal District and the Russian Federation. The high level of the crude incidence of the population of Yakutia of liver diseases, exceeding almost twice the indicators of the Far East Federal District and Russian Federation, steadily reserves in 2005-2009 years. Steadily high rates are observed in Allaikhovsky, Abyisky, Eveno-Bytantaysky, Tattinsky, Nyurbinsky regions. In 2009 in comparison with 2005 primary incidence of liver diseases sharply increased: in 9,5 times in Allaikhovsky, in 5 – in Tattinsky, in 4 in Anabarsky and in 3,6 times in Kobiaysky regions. [3].

Liver transplantation (LT) is the most effective and often the only radical and perspective method of treatment of patients with a terminal stage of the chronic liver diseases, acute hepatic failure, cancerous and benign liver tumor. Patients with cirrhosis (C) are the basis quota of the persons needing transplantation. For the last decades the number of the patients with cirrhosis of various etiologies needing liver transplantation [5] increased noteworthily.

Aim of the research is analysis of patient's condition after allotransplantation of cadaveric liver and live relative donor for cirrhosis.

MATERIALS AND METHODS

Clinical records of 21 patients aged 27-57 years who were on hospital treatment after LT in Therapy Department of "No.1 Republican Hospital - National Centre of Medicine" State-Financed Institution of the Republic of Sakha (Yakutia) in 2004-2015 are analyzed. The cause of the decompensated C of non-viral etiology was primary biliary cirrhosis (PBC) at 5 patients, 1 patient had primary sclerosing cholangitis and 15 patients - C of viral etiology, and one of them had hepatitis B and also transformation to hepatocellular carcinoma. All patients having coexistent diseases were examined by the therapist and specialized doctors: a cardiologist, a gastroenterologist, a physiotherapist, a surgeon, etc. All general clinical trials (clinical blood and urine analysis), biochemical blood count (hepatic tests, immunoassays, etc.), functional and tool methods of research, fibrogastroduodenoscopy, Abdominal ultrasonography, Computed Tomography (CT), etc. were conducted on all patients. Informed consent of patients to participation in investigation and conduction of additional diacritical interventions was an express condition.

RESULTS AND DISCUSSION

The first surgery on liver transplantation in No.1 Republican Hospital (Yakutsk) was performed in 2013, two surgeries – in 2014, 4 surgeries were performed current 2015. Middle age of patients is 40 years - 4 men and 3 women with cirrhosis of a viral etiology, and one of them is a patient with hepatocellular carcinoma. After liver transplantation the analysis indicators of this patient on cancer-specific marker were normalized (carcino-embryonic antigen – 2,70; alpha fetoprotein – 3,10). One patient died in the early postoperative period; multiple organ failure was cause of death of one patient.

The Sakha Republic (Yakutia) is endemic zone of prevalence of viral hepatitis B, C, and D. Hepatitis D virus (HDV) is infection often damaging young people able to work and it provides to chronization and enlargement of cirrhosis which quickly progressing to decompensated stage with expansion of portal hypertension, invalidization and high mortality [1].

Decompensation sets in cirrhosis at certain moment and blood flows through the veins of the esophagus. Therefore till 2005 in No.1 Republican Hospital the Therapy Department in common with doctors of Endoscopy Department conducted endoscopic sclerosing of varicosity

of esophagus and stomach by the specimen "etosklerol" and deligation of esophagus varicosity by ligatures that allowed to prevent recidivation of bleedings and to extend longevity of patients.

From 2004 Clinical centre of No.1 Republican Hospital - National Centre of Medicine is the branch of V.I. Shumakov Research Centre of Transplantology and Artificial Organs (Moscow). In 2004 we sent 4 patients for liver transplantation. The first 3 patients with cirrhosis of nonviral etiology (Hanot's cirrhosis, primary cirrhosis cholangitis) successfully underwent allotransplantation of cadaveric liver. In the course of the treatment the condition of patients was satisfactory [4].

From 2010 we investigated and sent 13 patients to V.I. Shumakov Research Centre of Transplantology and Artificial Organs, and also to A.I. Burnasyan Federal Medical Biophysical Centre (Moscow) – 5 of them with cirrhosis of non-viral etiology (4 with primary biliary cirrhosis and 1 with secondary biliary cirrhosis), 7 patients with cirrhosis of viral etiology and 1 with non verified cirrhosis. All patients underwent liver allotransplantation from live relative donor. In the early postoperative period 1 patient with primary biliary cirrhosis and 2 patients with hepatitis D virus died. In both cases the heavy reject phenomena developed. In 2010 cirrhosis occurs again at one patient's transplant, so she was returned to Research Centre of Transplantology and Artificial Organs, where she successfully underwent retransplantation of cadaveric liver with satisfactory function.

The condition of all patients after liver transplantation was evaluated as satisfactory in the course of the immunosuppressive treatment: Prograf, Medrol, Myfortic. After ternary immunosuppressive therapy the recrudescence of smoldering chronic inflammatory conditions of gastro-intestinal tract, urinoexcretory path, and cardiovascular system [2,6]. Also antibacterial, antiviral, hepato- and gastroprotective agents and semiologic therapy were assigned to patients for recrudescence of coexistent diseases. The degree of disability is determined to all patients; vocational rehabilitation noted in two patients.

CONCLUSION

The main etiologic factors of enlargement of decompensated cirrhosis are nonviral diseases such as primary biliary cirrhosis, primary sclerosing cholangitis and viral liver diseases – chronic viral hepatitis B, C, D. The conduction of vaccinal prevention and educative activities, genetic consultation among the population decrease liver diseases. It should be noted that early conducted surgery increases longevity of patients, improves the quality of their life.

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