

SURGICAL REMOVAL OF HEPATOCELLULAR CARCINOMA**F. G. Ulmasov, A. A. Kuliyeu, B. S. Esankulova, A. Y. Turayev**

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Key words: hepatocellular carcinoma, resection, liver.**Tayanch soʻzlar:** gepatotsellyulyar karsinoma, rezeksiya, jigar.**Ключевые слова:** гепатоцеллюлярная карцинома, резекция, печень.

Hepatocellular carcinoma (HCC) is a primary malignancy of the liver associated with significant morbidity and mortality. Surgical resection remains a cornerstone in the management of localized disease, offering a curative option for eligible patients. This case report highlights the successful surgical resection of an entire HCC tumor.

GEPATOTSELLYULYAR KARSINOMANI JARROHLIK YOʻLI BILAN OLIB TASHLASH**F. G. Ulmasov, A. A. Kuliyeu, B. S. Esankulova, A. Y. Turayev**

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Gepatotsellyulyar karsinoma (HCC) sezilarli darajada kasallanish va oʻlim bilan bogʻliq boʻlgan asosiy jigar saratonidir. Jarrohlik eksizyoni mahalliy kasalliklarni davolashning asosiy usuli boʻlib qolmoqda, bu esa mos bemorlar uchun eng yaxshi davolanishni taʼminlaydi. Ushbu hisobotda butun HCC oʻsimtasini jarrohlik yoʻli bilan olib tashlashning muvaffaqiyatli holati tasvirlangan.

ХИРУРГИЧЕСКОЕ УДАЛЕНИЕ ГЕПАТОЦЕЛЛЮЛЯРНОЙ КАРЦИНОМЫ**Ф. Г. Ульмасов, А. А. Кулиев, Б. С. Эсанкулова, Ф. Ю. Тураев**

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Гепатоцеллюлярная карцинома (ГЦК) – это первичная злокачественная опухоль печени, связанная с значительной заболеваемостью и смертностью. Хирургическое удаление остается ключевым методом управления локализованным заболеванием, предоставляя возможность наилучшего излечения для подходящих пациентов. В данном отчете описан успешный случай хирургического удаления всей опухоли ГЦК.

Introduction. One of the most prevalent cancers in Asia and Africa is hepatocellular carcinoma (HCC), and its prevalence is increasing in Western nations [5]. Its etiology is heavily influenced by chronic hepatitis C and B virus infections as well as drinking. When a patient first exhibits clinical symptoms, the tumor is typically progressed. Therefore, screening for HCC in people at high risk is appropriate. The use of potentially curative treatments, like liver resection and transplantation, is made possible by early identification of HCC.

Of all primary malignancies in liver tumors, hepatocellular carcinoma (HCC) accounts for 95% of cases [3]. One of the most prevalent types of cancer is hepatocellular carcinoma (HCC), which ranks first among malignant neoplasms of the liver in terms of prevalence and third in terms of death. HCV infection is the second most common cause of liver cancer worldwide and the leading cause in Western Europe, USA and Japan. The progression of the disease varies depending on the severity of fibrosis. In patients with mild or no fibrosis, cirrhosis develops in about one-third of cases within 10-20 years [2,7]. However, in patients with severe liver fibrosis, cirrhosis is observed in most cases within 5-10 years. HCC, which is liver cancer, is primarily seen in patients with HCV infection who already have cirrhosis, with an annual frequency of 1-4%. Over a period of 5 years, about 13% of patients with cirrhosis classified as class A according to Child-Pugh criteria will develop primary liver cancer [6,10].

HCC is unique, in that both the tumor stage and the degree of liver damage must be simultaneously considered when selecting the optimal treatment strategy [9]. For an individual patient, the most appropriate therapeutic option needs to be selected from among multiple approaches, including liver resection, percutaneous ablation, transarterial embolization (TAE) and transplantation, but few evidence-based guidelines for decision-making are available [10,11].

Patients with hepatocellular carcinoma (HCC) who have a single, large (>10 cm) tumor and who do not meet the Milan criteria are ineligible for liver ablation or transplantation [12]. For such individuals, major hepatectomy is still the only viable drastic therapy option [13]. However, the execution of a major hepatectomy is hampered, particularly for fibrotic livers, by insufficient future liver remnant (FLR) or an insufficient surgical margin. Post-hepatectomy liver failure (PHLF), a major contributor to perioperative mortality, could arise from insufficient FLR. In the normal liver, the FLR must be at least 25–30%, whereas in the cirrhotic liver, it must be at least

40% [15]. Additionally, a small surgical margin is a bad prognostic sign [14].

Case Presentation. A woman E.S., 32 years old. As per the patient, she has been considering herself ill for 3 months. She does not associate the illness with anything. The deterioration of the foresaid complaints has served the reason for the patient to apply to Okdaryo RMD seeking for medical help, where she was directed for an MRI. Abdominal MRI scan (by ZARMED DM 16.06.2023) showed volumetric derivative of segments V, VII, VIII of the right lobe of the liver, which is suggestive for Hepatocellular cancer, 1st degree hepatomegaly. Chronic cholecystitis with symptoms of dyskinesia. A small cyst in the middle third of the left kidney.

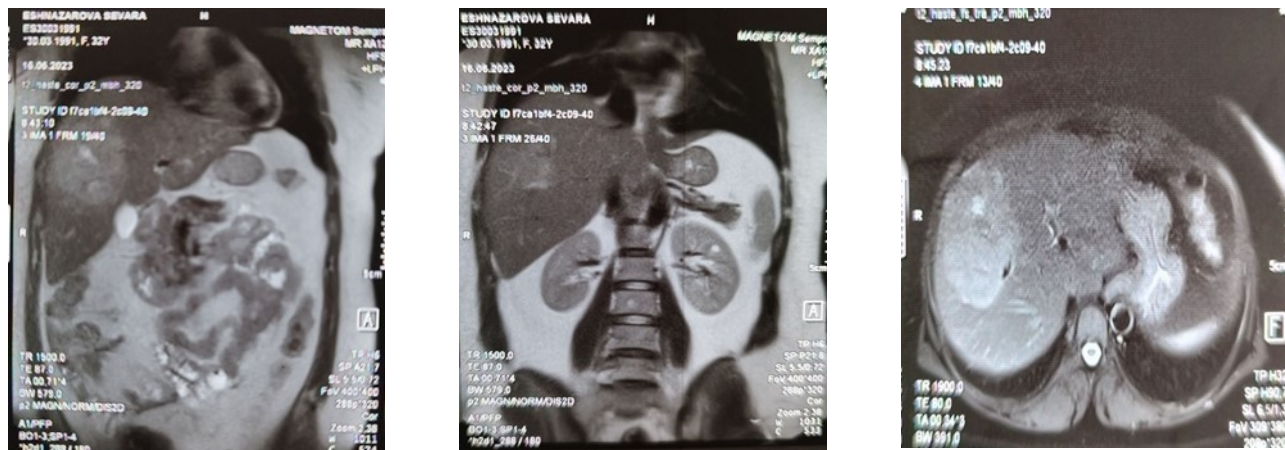


Figure 1. Abdominal MRI scan showed volumetric derivative of segments V, VII, VIII of the right lobe of the liver, which is suggestive for Hepatocellular cancer, 1st degree hepatomegaly.

Positive for HBV, negative for HCV (19.06.2023. by Almaz Medical DM); Both AIDS and VDRL tests (19.06.2023. Almaz Medical DM) are negative. The patient was recommended to see an oncologist. The patient applied to the Samarkand Branch of Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology, where she underwent an outpatient examination. Histological research No. 3209195 showed hyperplasia of hepatocytes (carried out by Allazov F.N.). The patient was hospitalized to the thoracoabdominal surgery department for complete examination and treatment.

Local status: The abdomen is symmetrical, does not participate in the act of breathing. The abdomen is soft, has painful sensations in the epigastric area and under the right rib cage. Liver and Spleen are not palpable.

On auscultation, intestinal peristalsis is heard. Defecation is free, prone to constipation, feces of normal color. Peripheral lymph nodes are not palpable.

Additional examination results: Abdominal MRI (by ZARMED DM 16.06.2023): Volumetric derivative of segments V, VII, VIII of the right lobe of the liver - suggestive for Hepatocellular cancer, 1st degree hepatosplenomegaly. Chronic cholecystitis with symptoms of dyskinesia. A small cyst in the middle third of the left kidney. Positive for HBV, negative for HCV (19.06.2023. by Almaz Medical DM); Both AIDS and VDRL tests (19.06.2023. by Almaz Medical DM) are negative. Mammary glands Ultrasound (the Samarkand Branch of Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology by 17.06.2023y.) detected fibrous mastopathy of mammary glands. Histological research No. 3209195 revealed hyperplasia of hepatocytes (by Allazov F.N.). Based on the patient's complaints, anamnesis, objective data and examination results, the following diagnosis was deduced: A tumor of liver segment V, VI and VII.

Operation name: Laparotomy. Right-sided hemihepatectomy. Drainage of the subhepatic branch and the right subdiaphragmatic branch.

Under general anesthesia, having treated the operative field thrice with iodine solution, a 22-cm upper-middle laparotomy was performed along the abdomen midline. Hemostasis. During the revision, an intraparenchymatous tumor of dense consistency, with uneven surface and 9.0 x 10.0 x 8.0 cm in size was found in the center of V, VI, VII segments along the surface of the right rib. The tumor proliferated to segments IV and VIII.(fig. 2). No pathological changes were detected in the remaining parts of the liver. Regional lymph nodes are not enlarged.

The tumor of the right lobe of the liver increased dramatically in dynamics. Based on the

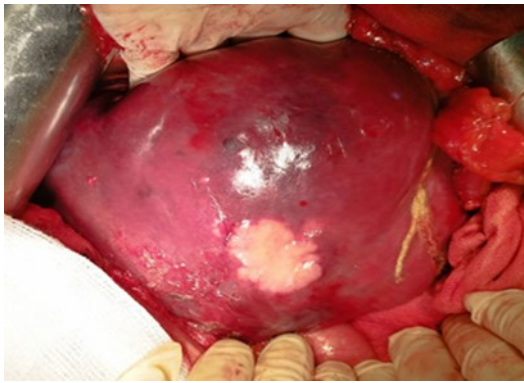


Figure 2.

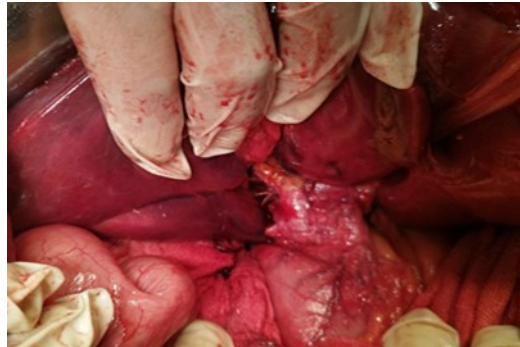
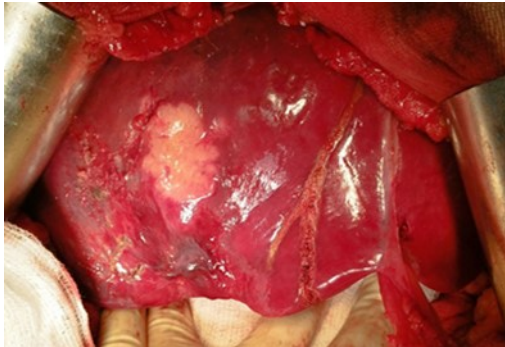


Figure 3.

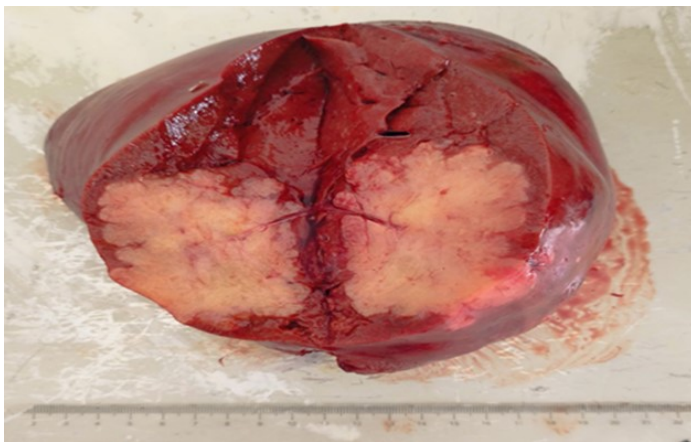


Figure 4. Macropreparation.

clinical diagnosis and revisional evaluation of operability, it was concluded to perform the right hemihepatectomy. The round and falciform ligaments of the liver were cut and mobilized. In the hepatoduodenal ligament, the artery, vein, and bile ducts were separated, and the artery leading to the right lobe of the liver was tied and sutured. The veins of the right lobe of the liver were tied and cut separately from the part that flows into the inferior vena cava. The border of the right liver lobe was separated from the left lobe after connecting the artery. With the help of an electric cauterizer, a resection line was marked between the border of the tumor and healthy tissue located in the right lobe.

Hepatoduodenal ligament was temporarily replaced with a tourniquet. The tumor located in the parenchyma of the right liver lobe was ceased with clamps at the border of healthy tissue, blood vessels and bile ducts were cut step by step.

Macropreparation was removed, right hemihepatectomy was performed. Hemostatic sutures were placed instead of the tumor. Hemostasis - dry. A control tube was inserted into the subhepatic area and the right subdiaphragmatic area through the contraperture on the right side. The wound was stitched up. Iodine-aseptic bandage was attached. The volume of blood losses - 400 ml.

Macropreparation (fig.4): size 9.0x10.0x8.0 cm, intraparenchymatous, of dense consistency, dark brown color, with uneven surface. The preparation was sent for histo-examination.

Histopathological findings № 36056-60: Hepatocellular Carcinoma
 Post-operative diagnosis: Liver segment V, VI, VII cancer sT3N0M0. II-cl.gr. II-stage.
 Comorbidity: vegetative vascular dystonia of cardiac type. 1st degree anemia. 1st degree obesity (BMI = 34.9).

Summary. This instance emphasizes the value of prompt diagnosis and therapy for people with HBV-related HCC. For localized HCC in individuals with maintained liver function, surgical excision continues to be the gold standard of care. The surgical management of these individuals is complicated by the cirrhosis.

Hepatocellular carcinoma can manifest clinically in a variety of ways, ranging from asymptomatic development to rapid pathological process advancement. The etiology, duration of the liver disease, activity of the liver process, size of the tumor, number of tumor growths, severity of previous liver cirrhosis, and presence of complications (vascular invasion, portal vein thrombosis, hepatic encephalopathy) all affect the disease's course [7,8].

Conflict of interest. The authors declare no conflict of interest.

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