


Hepatobiliary Cancers: Progress in Diagnosis, Pathogenesis, and Treatment

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Abstract

Hepatobiliary cancers comprise a wide range of malignancies such as hepatocellular carcinoma and cholangiocarcinoma, and they are some of the most challenging to treat human neoplasms. Due to the rarity of the illnesses, the development of treatment measures for malignancies of the gastrointestinal system is far behind. The number of patients eligible for curative treatment is limited due to cancer's aggressive nature and the difficulties of early identification. Furthermore, surgery is frequently intrusive and linked with a significant level of risk. The therapy result of hepatobiliary cancers is unsatisfactory due to these complicated variables, leaving significant space for improvement.

Keywords

hepatocellular carcinoma, cholangiocarcinoma, signaling pathway, liver cancer, hepatobiliary cancer

Abbreviations

HCC, Hepatocellular carcinoma; CCA, Cholangiocarcinoma.

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Hepatobiliary cancers comprise a wide range of malignancies such as hepatocellular carcinoma (HCC), cholangiocarcinoma (CCA), and gallbladder cancer, and they are some of the most challenging to treat human neoplasms.¹ Due to the rarity of the illnesses, the development of treatment measures for malignancies of the hepatobiliary system is far behind. The number of patients eligible for curative treatment is limited due to the cancer's aggressive nature and the difficulties of early identification. Furthermore, surgery is frequently intrusive and linked with a significant level of risk.^{2,3} The therapy result of hepatobiliary cancers is unsatisfactory due to these complicated variables, leaving significant space for improvement.

In recent years, there have been several advancements in the treatment of hepatobiliary cancers. The introduction of HCC molecular targeted drugs and immunotherapies has transformed the treatment of advanced HCC.^{4,5} The development of minimally invasive laparoscopic surgery has increased the number of patients who benefit from surgery, and it may help to widen the reasons for liver surgery in the future. The list of indications for liver transplantation for hepatobiliary cancers has steadily grown, and it may now be the only option for patients who are otherwise terminal.^{4,6}

Despite their rarity, CCAs are becoming more common due to a rise in the incidence of intrahepatic cholangiocarcinoma (iCCA).⁷ The majority of patients are diagnosed late due to

barriers at the time of diagnosis. This implies that palliative care is the only treatment option for the great majority of patients; as a result, the prognosis remains bleak, with a 5-year survival rate of around 5% to 15% when all phases are taken into account.^{8,9}

To summarize, hepatobiliary cancers diagnosis and care are constantly expanding areas that would need comprehensive cooperation in order to support current and future patients. This special issue "Hepatobiliary Cancers: The Mechanisms and Treatments" gives an overview of the key topics of interest in cholangiocarcinoma research, for this we would like to gather research articles and review papers that cover major contributions in this areas.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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