

Journal of Liver: Disease & Transplantation

Short Communication

Hepatic Cancer and Its Global Impact on Public Health

Rieter Honzum^{*}

Department of General Surgery, Hacettepe University, Ankara, Turkey

*Corresponding Author: Rieter Honzum, Department of General Surgery, Hacettepe University, Ankara, Turkey; E-mail: honzumr@gmail.com

Received date: 20 November, 2023, Manuscript No. JLDT-23-123846;

Editor assigned date: 22 November, 2023, Pre QC No. JLDT-23-123846 (PQ);

Reviewed date: 06 December, 2023, QC No. JLDT-23-123846;

Revised date: 13 December, 2023, Manuscript No. JLDT-23-123846 (R):

Published date: 20 December, 2023, DOI: 10.36648/2325-9612.100243

Description

Hepatic cancer, or liver cancer, stands as a formidable challenge in the realm of oncology, affecting millions of lives worldwide. The liver, a vital organ responsible for numerous physiological processes, becomes a battleground for malignant transformations that give rise to various forms of liver cancer. The prognosis for liver cancer is significantly influenced by the stage at which it is diagnosed. Early detection offers better chances of successful treatment [1]. The presence of cirrhosis or chronic liver disease can impact the overall prognosis and treatment options. Hepatic cancer poses substantial public health challenges, necessitating comprehensive approaches to prevention, early detection, and treatment. Efforts to address risk factors, improve vaccination coverage for hepatitis B, and enhance public awareness are integral components of a global strategy against liver cancer.

Hepato Cellular Carcinoma (HCC) is the most prevalent form of liver cancer, originating in hepatocytes. HCC often develops in the setting of chronic liver diseases such as cirrhosis, hepatitis B, or hepatitis C. Intrahepatic Cholangio Carcinoma (ICC) Arises from the cells of the bile ducts within the liver [2-4]. ICC poses distinct challenges in diagnosis and treatment compared to HCC. Hepatoblastoma is a rare form of liver cancer primarily affecting children. Hepatoblastoma arises from immature liver cells and requires specialized pediatric oncology care. Chronic infection with Hepatitis B (HBV) or Hepatitis C (HCV) significantly increases the risk of developing liver cancer. Long-term liver damage and scarring, often resulting from chronic alcohol consumption, viral hepatitis, or Non-Alcoholic Fatty Liver Disease (NAFLD), elevate the risk of liver cancer. The accumulation of fat in the liver, commonly associated with obesity and metabolic syndrome, is emerging as a significant risk factor for liver cancer [5]. Inherited conditions such as hemochromatosis, Wilson's disease, and certain metabolic disorders can predispose individuals to liver cancer. Consumption of food contaminated with aflatoxins, produced by certain molds, is a risk factor prevalent in certain geographic regions. Prolonged and excessive alcohol consumption contributes to liver damage and increases the risk of liver cancer.

Clinical manifestations

Hepatic cancer often remains asymptomatic in its early stages, making early detection challenging [6]. As the disease progresses,

A SCITECHNOL JOURNAL

symptoms may include abdominal pain, unexplained weight loss, fatigue, jaundice, and an enlarged liver. Ultrasonography, Computed Tomography (CT), and Magnetic Resonance Imaging (MRI) help visualize the liver, identify tumors, and assess their characteristics. A tissue sample is obtained for pathological examination, confirming the presence of cancer and providing information about the cancer's type and grade [7]. Elevated levels of Alpha-Feto Protein (AFP) and other liver enzymes can indicate liver dysfunction and raise suspicion for hepatic cancer. Endoscopic Ultra Sound (EUS) and Endoscopic Retrograde Cholangio Pancreatography (ERCP) can aid in visualizing tumors and obtaining tissue samples [8]. Surgical resection, liver transplantation, and tumor ablation are potential approaches for earlystage liver cancer, depending on the tumor size, location, and overall liver function.

This procedure involves injecting chemotherapy drugs directly into the blood vessels feeding the tumor, combined with embolization to block blood flow to the cancerous cells. Targeted therapies and immunotherapy are emerging as effective options for advanced-stage liver cancer, providing new avenues for personalized treatment approaches. Palliative interventions focus on relieving symptoms and improving the quality of life for individuals with advanced liver cancer [9]. Vaccination against hepatitis B significantly reduces the risk of developing liver cancer. Regular screening for individuals at high risk, including those with chronic viral hepatitis or cirrhosis, allows for early detection and intervention. Encouraging healthy lifestyle choices, including limiting alcohol consumption, maintaining a healthy weight, and avoiding exposure to toxins, contributes to liver health [10].

Conclusion

In conclusion, hepatic cancer emerges as a multifaceted challenge with significant implications for global public health. The diverse etiologies, complex diagnostic pathways, and evolving treatment modalities underscore the need for a comprehensive approach to prevention, early detection, and management. Ongoing research endeavors aim to uncover new therapeutic targets, refine diagnostic tools, and explore the molecular intricacies of hepatic cancer. Advances in precision medicine and the identification of biomarkers hold promise for more tailored and effective treatment strategies. As the landscape of oncology continues to evolve, continued research and international collaboration are paramount for unraveling the complexities of hepatic cancer and improving outcomes for affected individuals. The integration of innovative therapies, public health initiatives, and personalized medicine paves the way for a future where hepatic cancer becomes a conquerable adversary.

References

- Lai EC, Lau WY (2005) The continuing challenge of hepatic can 1. cer in Asia. The Surgeon 3(3):210-215.
- Tong CM, Ma S, Guan XY (2011) Biology of hepatic cancer 2. stem cells. J Gastroenterol Hepatol 26(8):1229-1237.
- Ho S, Lau WY, Leung TW, Johnson PJ (1998) Internal radiation 3. therapy for patients with primary or metastatic hepatic cancer: a review. CA Cancer J Clin 83(9):1894-1907.
- Grady ED (1979) Internal radiation therapy of hepatic cancer. 4. Dis Colon Rectum 22(6):371-375.



All articles published in Journal of Liver: Disease & Transplantation are the property of SciTechnol and is protected by copyright laws. Copyright © 2023, SciTechnol, All Rights Reserved.

- 5. Ji J, Yamashita T, Budhu A, Forgues M, Jia HL et al. (2009) Identification of microRNA-181 by genome-wide screening as a critical player in EpCAM–positive hepatic cancer stem cells. Hepatol 50(2):472-480.
- 6. Chow EK, Fan LL, Chen X, Bishop JM (2012) Oncogenespecific formation of chemoresistant murine hepatic cancer stem cells. Hepatol 56(4):1331-1341.
- 7. Obi S, Sato S, Kawai T (2015) Current status of hepatic arterial infusion chemotherapy. J Liver Cancer 4(3):188-199.
- Cohen AD, Kemeny NE (2003) An update on hepatic arterial infusion chemotherapy for colorectal cancer. J Oncol 8(6): 553-566.
- 9. Kemeny N, Fata F (2001) Hepatic-arterial chemotherapy. Lancet Oncol 2(7):418-428.
- Kemeny N, Huang Y, Cohen AM, Shi W, Conti JA et al. (1999) Hepatic arterial infusion of chemotherapy after resection of hepatic metastases from colorectal cancer. N Engl J Med 341(27):2039-2048.