

Chronic HBV Infection Can Cause Liver Scarring

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Introduction

Hepatitis B and C are two viral infections that silently undermine liver health, affecting millions of individuals globally. These infections can lead to chronic liver disease, cirrhosis, and even liver cancer if left untreated. This article delves into the intricate world of Hepatitis B and C, exploring their modes of transmission, clinical presentation, risk factors, diagnosis, treatment options, and the significance of raising awareness to curb their impact on public health. Both Hepatitis B and C are caused by viruses that target the liver, resulting in inflammation and potential long-term damage. HBV is transmitted through contact with infected blood, bodily fluids, or from mother to child during childbirth. It can lead to acute or chronic infections. Chronic HBV infection can cause liver scarring (cirrhosis) and increase the risk of liver cancer. Vaccination is available and highly effective in preventing HBV transmission [1].

Description

HCV is primarily spread through contact with contaminated blood, often through sharing needles, receiving unscreened blood transfusions, or unsafe medical practices. It can also be sexually transmitted. Chronic HCV infection can lead to liver damage and increase the risk of cirrhosis and liver cancer. Unlike HBV, there is no vaccine for HCV, but highly effective treatments are available. Unprotected sexual contact, sharing needles, and contact with infected blood or open sores can lead to transmission. Infants can contract HBV from their infected mothers during childbirth or through breast milk [2].

Unsafe medical injections or procedures can also lead to transmission. Sharing needles is a significant risk factor, especially among drug users. HCV transmission was common before the implementation of blood screening practices. Unsafe medical procedures, such as inadequate sterilization of equipment, can lead to transmission. While less common, sexual transmission can occur, especially among individuals with multiple partners. Vertical transmission can occur during childbirth, though the risk is relatively low. Both Hepatitis B and C can present as acute or chronic infections. Acute infections often have mild or no symptoms, making them difficult to detect. Chronic infections, on the other hand, can lead to serious complications. Prolonged inflammation can result in scar tissue formation, leading to impaired liver function. Chronic infection increases the risk of liver cancer, particularly in individuals with cirrhosis. Advanced liver damage can result in liver failure, requiring transplantation [3].

Both viruses can affect other organs, leading to conditions like glomerulonephritis and cryoglobulinemia. Early diagnosis is crucial for effective management of Hepatitis B and C. Testing typically involves blood tests to detect viral markers and assess liver function. Tests include, HBsAg, Anti-HBs, Anti-HBc, and HBV DNA tests. HCV Antibody test followed by HCV RNA test to confirm active infection. Liver imaging, such as ultrasound, and elastography, can assess liver health and the degree of fibrosis. Advancements in medical science have transformed the landscape of Hepatitis B and C treatment. Here's an overview of the available options [4].

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Received: 01 July, 2023, Manuscript No. rrms-23-112185; **Editor assigned:** 03 July, 2023, PreQC No. P-112185; **Reviewed:** 15 July, 2023, QC No. Q-112185; **Revised:** 21 July, 2023, Manuscript No. R-112185; **Published:** 29 July, 2023, DOI: 10.37421/2952-8127.2023.7.117

Oral antiviral drugs can suppress viral replication, reduce inflammation, and prevent complications. Interferon injections stimulate the immune system to fight the virus. Highly effective, well-tolerated oral medications that target specific steps in the HCV lifecycle. Older treatment options, now less commonly used due to DAAs' superior efficacy and tolerability. Prevention and Raising Awareness. Preventing Hepatitis B and C involves a combination of vaccination, safe practices, and awareness campaigns. Hepatitis B vaccination is a crucial preventive measure, especially for infants and individuals at higher risk. Ensuring the use of sterile needles and equipment in healthcare settings and among drug users. Practicing safe sex, including condom use, can reduce the risk of transmission. Implementation of strict blood screening measures has significantly reduced HCV transmission through blood products. Public awareness campaigns can educate communities about transmission risks and preventive measures [5].

Conclusion

Hepatitis B and C are formidable adversaries that demand our attention, understanding, and proactive action. By unraveling the intricate mechanisms of these viral infections, recognizing their risk factors and clinical presentations, and advocating for early diagnosis and appropriate management, individuals can contribute to a world where Hepatitis B and C's impact on liver health is significantly curtailed. Through collaborative efforts, awareness campaigns, and healthcare initiatives, the silent threats posed by these viruses can be addressed, paving the way for healthier lives and a brighter future for millions around the globe.

Acknowledgement

None.

Conflict of Interest

None.

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How to cite this article: Terrault, Norah. "Chronic HBV Infection Can Cause Liver Scarring." *Res Rep Med Sci* 7 (2023): 117.