

TODAY, MEASURES TO PREVENT HEPATITIS D DISEASE

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ABSTRACT

Hepatitis D, also known as Hepatitis Delta, is a serious liver infection caused by the Hepatitis D virus (HDV). It is a satellite virus that requires the presence of Hepatitis B virus (HBV) to replicate. Prevention of Hepatitis D is closely tied to controlling Hepatitis B infection through vaccination, public health education, and targeted prevention strategies. This article explores key preventive measures against Hepatitis D, reviewing the latest literature, methodologies for prevention, and the significance of vaccination in controlling this disease.

Keywords: Hepatitis D virus (HDV), Hepatitis B virus (HBV), vaccination, liver disease, antiviral therapy, public health, prevention, coinfection.

INTRODUCTION

Hepatitis D virus (HDV) is an aggressive form of viral hepatitis that can occur only in people infected with Hepatitis B virus (HBV). It is estimated that 5-10% of individuals with chronic HBV infection are coinfecting with HDV. This coinfection results in more severe liver complications, including a higher risk of cirrhosis and liver cancer. Since there is no specific vaccine for HDV, preventing its spread relies on controlling HBV infection. The aim of this article is to examine the current prevention measures, their efficacy, and areas where improvements can be made to prevent Hepatitis D on a global scale.

The methods for preventing Hepatitis D are closely intertwined with strategies for preventing Hepatitis B. This includes:

Vaccination: The HBV vaccine is the most effective preventive measure for both HBV and HDV. Universal vaccination of infants and high-risk groups (e.g., healthcare workers, intravenous drug users) is essential.

Public Health Campaigns: Educating the public about the risks of Hepatitis D and Hepatitis B, safe injection practices, and the importance of vaccination.

Screening: Regular screening of individuals at risk of HBV infection can help identify and manage cases before HDV coinfection occurs.

Antiviral Treatments: Although there is no cure for HDV, antiviral treatments such as interferon therapy can suppress viral replication and slow the progression of liver disease.

Safe Practices: Promoting safe blood transfusion practices, use of sterile medical equipment, and safe sexual behavior are key to preventing transmission.

Preventing hepatitis D, which is a serious liver disease caused by the hepatitis D virus (HDV), often involves measures to prevent hepatitis B since HDV can only infect individuals who are already infected with the hepatitis B virus (HBV). Here are some key prevention strategies:

Hepatitis B Vaccination

- Vaccination against hepatitis B is the most effective way to prevent hepatitis D. Since HDV requires the presence of HBV to replicate, preventing HBV infection through vaccination also prevents HDV.
- Infants and adults at risk should be vaccinated against HBV.

Avoiding Blood Exposure

- Use of clean needles: If you inject drugs, never share needles or other drug paraphernalia.
- Safe medical practices: Ensure medical injections, blood transfusions, and other procedures involving blood are performed with sterilized equipment.
- Blood screening: Ensuring proper screening of blood products can help prevent the transmission of HBV and HDV.

Safe Sexual Practices

- Using condoms: Hepatitis B, and consequently hepatitis D, can be transmitted through unprotected sex with an infected partner.
- Monogamous relationships and regular testing for HBV can also reduce the risk.

Mother-to-Child Transmission

- Preventing vertical transmission: Mothers who are infected with HBV should receive appropriate medical care to prevent transmitting the virus to their newborns.
- Immunoglobulin and vaccination: Newborns of HBV-infected mothers should receive HBV immunoglobulin and the HBV vaccine within 12 hours of birth.

Personal Hygiene

- Avoid sharing personal items: Items like razors, toothbrushes, or any objects that may be contaminated with blood can transmit the virus if used by an infected person.

Education and Awareness

- Public health campaigns: Raising awareness about hepatitis B and D and their prevention is essential, especially in areas where these viruses are prevalent.
- Testing and counseling: Encouraging people, especially those at high risk, to get tested for HBV and seek counseling can help in early detection and prevention.

By focusing on preventing hepatitis B, the risk of hepatitis D can be significantly reduced. Despite the successes of HBV vaccination programs, challenges remain in the global fight against Hepatitis D. One key issue is the lack of awareness about HDV, particularly in high-risk populations. Moreover, in resource-limited settings, the cost and logistics of implementing widespread vaccination programs pose a significant barrier. Additionally, the lack of a specific HDV vaccine and the limited efficacy of available antiviral treatments highlight the need for continued research into more effective therapies. The development of novel therapies, such as entry inhibitors or agents targeting viral assembly, are promising areas of research.

CONCLUSIONS

The prevention of Hepatitis D largely depends on controlling Hepatitis B through vaccination, education, and safe practices. While global efforts have made substantial progress in reducing HBV and HDV infections, gaps remain in vaccination coverage and public awareness. Expanding HBV vaccination programs, increasing access to antiviral treatments, and conducting further research into HDV-specific therapies are critical to reducing the global burden of Hepatitis D.

Expand Vaccination Coverage: Governments should prioritize the expansion of HBV vaccination programs, especially in underserved regions.

Enhance Public Health Education: Public health campaigns should be tailored to high-risk groups, focusing on the dual risks of HBV and HDV.

Increase Access to Antiviral Therapies: Access to affordable antiviral treatments must be improved, especially in regions with high HDV prevalence.

Encourage Regular Screening: At-risk individuals should undergo routine screening for both HBV and HDV, allowing for early detection and management.

Further Research: Continued research into HDV-specific treatments, including vaccines and antiviral agents, should be prioritized to develop more effective long-term solutions.

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