



Hepatitis and Its Association with Dentists on World Hepatitis Day

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INTRODUCTION

Hepatitis is an inflammatory disease of the liver. Hepatitis is of five clinical types - Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis D, and Hepatitis E. Hepatitis B and Hepatitis C can cause severe liver disease because of liver cancer and cirrhosis of the liver.¹ Hepatitis is caused by viruses and non-infectious agents including alcohol, medications, and drugs. The transmission of the Hepatitis virus includes transfusion of blood, vertical transmission during pregnancy from mother to child, contaminated needles use, and unprotected sex.²

The symptoms of the liver disease are vomiting, nausea, fatigue, fever, malaise, jaundice, weight loss, and abdominal discomfort, hepatomegaly, angioedema. The oral manifestations of Hepatitis include petechiae, ecchymosis, hemorrhagic ulcers, color change in oral mucosa, and delayed healing. The oral manifestations are often seen associated with the signs and symptoms of liver disease.

Laboratory investigations that should be done for patients with Hepatitis infection include complete blood count, bleeding time, international normalized ratio, partial thromboplastin time, prothrombin time, serological tests for Hepatitis antigen, and antibody titers, liver function tests, and liver enzymes tests. Patients with Hepatitis infection recover after 3 months so only the emergency dental treatment is done for them. Ultrasonic scaling and the use of high-speed instruments are not recommended for patients with Hepatitis infection and instruments should be sterilized after use.

The World Health Organization reports 2 million injuries which result in 66,000 Hepatitis B infections among 335 million health care workers per year.³ These injuries can be due to sharp instruments and needle sticks. Dentists are exposed to contaminated aerosols, contaminated fluids, contaminated blood, and injuries due to sharp instruments. Dentists are more commonly affected by the Hepatitis B infection as they get more exposed to the patients with Hepatitis B. Hepatitis B

virus gets transmitted through the blood, saliva, gingival crevicular fluid,⁴ and blood-contaminated products from the infected person.

Dental professionals should be evaluated for antibody titers to reduce the risk of Hepatitis infection. Necessary measures should be taken to prevent the spread of the Hepatitis virus in the dental fraternity. Hand washing should be encouraged before and after the treatment along with the use of protective equipment such as gloves, eyewear, face mask and head caps. Disposable covers should be used for the dental X-ray light handles, sensors, and trays. Immunization against the Hepatitis infection is recommended for all dental professionals. Three doses of Hepatitis should be taken by all dental professionals for decreasing the spread of Hepatitis infection. All dental instruments should be sterilized, and sharp instruments should be handled carefully to prevent injury.

World Health Organization introduced post-exposure prophylaxis guidelines for occupational injuries to the dentist which will help in the prevention of infection.⁵ Dental professionals are supposed to clean the site of exposure with the water and test the patient for the antibodies against HBsAg. In case of a positive report of a Hepatitis infection in the patient, the exposed dentist should start with antiviral therapy. The nucleoside analogs (Lamivudine) and Fanciclovir are the treatment of choice for Hepatitis infection to decrease viral replication.

CONCLUSION

This short commentary will help in providing knowledge to the dental students and dental professionals regarding the prevention, and post-exposure prophylaxis with Hepatitis infection. Dental programs about Hepatitis B should be carried out among dentists to promote knowledge and safety measures for the prevention of Hepatitis infection. The organizations should provide treatment to the poor people with hepatitis infection to decrease the spread



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of new hepatitis infections and prevent death due to Hepatitis infection.

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