Editorial

Editorial: Protection against Hepatitis A Infection in Inflammatory Bowel Disease—Time for Evidence-Based Change in Practice

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Patients with inflammatory bowel disease (IBD) are at an increased risk of infection due to factors like use of immunosuppressive drugs and poor nutritional status.[1] Immunization is a cost-effective and simple way to protect against several infections. Some of the recommended vaccines in IBD include those against hepatitis B, influenza, varicella, pneumococcus, diphtheria, tetanus, measles, mumps, rubella, and hepatitis A. However, despite the recommendations by various expert groups and societies, the rate of vaccination against infectious diseases is quite low among patients with IBD.[1,2] Hepatitis A virus (HAV) is an RNA virus that is transmitted through contaminated food and water or direct contact. Infection is common in regions with poor sanitation and hygiene. It is one of the causes of acute viral hepatitis, although the infection is asymptomatic in vast majority of the cases. Vaccines (inactivated as well as live attenuated) are available against HAV and after two doses, they offer more than 95% protection against infection.[3] Yet vaccination rate against hepatitis A is poor in patients with IBD.[1]

Infection with HAV is prevalent is South Asian and South East Asian countries as well as sub-Saharan Africa and majority of the infection occurs during childhood.[4] Hence, as recommended by the World Health Organization, immunization with HAV vaccine may not be required in all individuals in highly endemic regions.[5] Therefore, there is a need to evaluate the prevalence of HAV infection as well as immunization practices in patients with IBD in different parts of the world for making recommendations for clinical practice and identifying knowledge gaps. In this issue of the journal, Jena et al have addressed this issue by performing the first systematic review and meta-analysis on HAV vaccination in patients with IBD.[6] The outcomes assessed were seroprevalence of HAV in IBD, rate of vaccination against HAV in IBD, and seroconversion rate after vaccination. The pooled seroprevalence was 0.36 (95% confidence interval [CI]: 0.22–0.53), rate of vaccination was 0.21 (95% CI: 0.14–0.3), and seroconversion rate after two doses of vaccines was 0.93 (95% CI: 0.88–0.96).[6]

This review provides crucial information on the immunization practices against HAV in IBD and the seroconversion rate after vaccination. The authors must be commended for their efforts. The first key observation is the lack of past infection in about two-thirds of patients based on the seroprevalence rate. Although, infection with HAV is mild, the risk of serious infection is higher in adult/older subjects and with a significant proportion of IBD patients unexposed to previous infection, immunization should be strongly considered.[7] The ideal strategy would be to check for past infection by serological test and vaccinate those with a negative result. This is especially true for countries with high rate of infection. For instance, reports from India suggest that more than 90% of adults have serological evidence of past infection with HAV.[8,9] The second key observation is the low rate of immunization with HAV vaccine. Out of the 18 studies reporting on vaccination rate, most of them were from developed countries where the seroprevalence of HAV infection is relatively low and a greater proportion of patients would benefit from immunization.[10] This stresses on the need for improved awareness to address this lacuna in practice. The seroconversion rate, which was 0.47 after the first dose, improved to above 90% after 2 doses. The current practice of administering two doses of vaccine 6 to 12 months apart is appropriate and the immunity provided has been shown to last for many years.[3] The response to vaccination was not significantly impacted by the use of immunosuppressive drugs except in one study and hence the vaccine may be given

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at any time, although early immunization should be preferred. A combination of HAV and hepatitis B virus vaccine is also available and this may be used to improve compliance when there is a need for administering both vaccines.

Despite including a large number of studies, the majority of data in this review are from few European and North American countries that limit generalization of the findings from this review.[6] There are only few reports from Asia and South America and none from Africa. There was also significant heterogeneity in data on seroprevalence of HAV and rate of vaccination against HAV. The method of assessing vaccination rate varied across studies and only few of them used documented records (electronic database or vaccine records). These points should be considered while interpreting the results from this review. The current review highlights the need for data from different parts of the globe to have a fair understanding of the situation in different regions. The guidelines for immunization against HAV may have to region specific based on the local prevalence of HAV. In addition, prevalence data would also reflect the need for measures like safe drinking water supply, better waste disposal facilities, and better personal hygiene practices to prevent transmission of infectious diseases in general.

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