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### Association between hepatitis B virus and celiac disease patients in Khartoum State, Sudan

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**Background:** It has been hypothesized that non-intestinal inflammatory diseases such as hepatitis B virus (HBV) and hepatitis C virus (HCV) may trigger immunological gluten intolerance in susceptible people. This hypothesis suggests a possible epidemiological link between these two diseases.

**Method:** ELISA third generation for *Hepatitis B surface antigen* (HBsAg) was used in 131 blood samples of patients with seropositive and seronegative for celiac disease (CD). Positive and negatives ELISA samples were confirmed using PCR for detection of HBV DNA. Data on various variables were collected from patients CD using a structured questionnaire after taking informed consent.

**Results:** The prevalence of HBs Ag detected in seropositive celiac disease was 9.9% by serology (ELISA) and 8.5% using PCR. PCR detected two samples out of 64 (3.1%) as positive for HBV DNA which were negative by HBs Ag ELISA which indicated occult HBV infection. No statistical significant was difference ( $P>0.05$ ) among subjects when distribution of HBV was studied on the basis of age and gender.

**Conclusions:** The results herein reported that there was an association between HBV and CD in the Khartoum State, Sudan as evident from the significantly higher prevalence of HBV infection in CD patients compared to CD seronegative patients included in the current study.

#### Biography

Shiraz Gamal has completed her BSc in Medical Microbiology from Al Neelain University, Faculty of Medical Laboratory Sciences, Khartoum, Sudan in 2008 and completed her MSc in Medical Microbiology in 2013. She is the Head of the Medical Microbiology Department at the dermatology and venereal diseases – Khartoum Hospital. She has more than 6 years experience in the field of microbiology.

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