Prevalence of SEN Virus Infection in Multitransfused Patients in Assiut University Hospitals, Egypt

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Abstract:

SENV is a blood- borne, circular ss DNA virus and possessing nine genotypes (A to I). Among nine genotypes, SENV-D and SENV-H genotypes have the strong link with patients with non (A-E) hepatitis infections. Recently, the identification of SEN virus (SENV) as a possible etiologic agent of parenteral transmission hepatitis let to the study of the prevalence of such agent. This study compared SENV prevalence and its two important genotypes (D&H) which might be pathogenic in high risk subjects including blood transfused patients and hemodialysed patients and low risk subjects as healthy blood donors. Subjects and methods: This study included 75 multitransfused patients, 60 of them were hemodialysed and the remaining were blood diseased including haemophilics, anaemics and leukemics. The study included also 25 healthy blood donors as a control. They were enrolled consecutively at the department of Internal Medicine, Assiut University Hospital. The sera were separated and SENV DNA was detected by polymerase chain reaction. Results: A higher prevalence of SENV infection was detected in patients groups than in blood donors (46.7% versus 20%).No significant relation was found between SENV infection and age, duration of haemodialysis or liver enzymes. However, there was significant difference between SENV positive and negative patients as regards gender and number of blood transfusions. Conclusions: SENV is commonly present in blood transfused and haemodialysed patients attended to Assiut University Hospitals as well as in blood donors at comparable rates. SENV infection has been found in only 20% of blood donors but in 46.7% of patients. The results also indicated that other possible routes of SENV infection other than blood transfusion may be included. Its pathogenic role in causing hepatitis is not documented, so far it can be considered as simple guest till further studies have been done.

Keywords:

SEN virus, blood transfusion, haemodialysis, genotyping, prevalence.

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