

Summary

Egypt has the highest HCV prevalence in the world (10%-20%) of general population are infected and HCV is the leading cause of HCC and chronic liver disease in the country.

Approximately 90% of Egyptian HCV isolates belong to a single sub type (4a) which responds less successfully to interferon therapy than other subtypes.

Our study aims to evaluate the prevalence of HCV infection and its association with diabetes mellitus in randomly selected residents of Ehwa village , Bani Suef governorate, as an example of rural areas of Bani Suef governorate. Our study was conducted in Ehwa village ,Bani Suef governorate in the period between June 2009 and June 2010.

Four hundred residents participated, aged from 15 to 70 years, selected by systematic random sample (we chose all residents of one house every ten houses).

We asked the residents for risk factors of HCV infection including (surgical operation, blood transfusion, anti

bilharzial treatment, endoscopy, pinprick) and history suggestive of chronic liver disease (jaundice, lower oedema , abdominal distension , bleeding)and history of diabetes mellitus.

Physical examination were done to all participants

Abdominal ultrasound were done for HCV positive patients.

Laboratory investigation included

- HCV antibodies by ELISA 3rd generation.
- Liver enzyme ALT.
- Fasting blood glucose & 2 hours post prandial.
- HCV RNA by PCR for HCV Ab positive cases.

In our study we found that the prevalence rate of HCV antibody in Ehwa village was 36% which is more in older groups and nearly equal in both sex (in males 35.7% & female 36.4%).

In this study , we found (26.2%) of the residents reported history of shistosomiasis with tartar emetic injection especially above the age of 30 years old and this shows

the strong relation between the prevalence of HCV and shistomiasis. In our study, we found significant relation between HCV and invasive procedures especially (wound suturing, surgery, abscess drainage, intravenous and urinary catheterization) mainly above age of 30 years old.

We also found a significant association between HCV and obstetric intervention in the women above age of 20 years old. As regards blood transfusion there is significant relation between it and HCV in both age groups.

In our study group 33% gave a history of dental procedures which was statistically significant.

The individuals mostly had elevated ALT levels.

We found 94.4% of HCV antibody positive cases to be PCR positive.

We found significant relation between HCV antibody positivity and blood glucose levels (14.6% of HCV positive group were diabetics compared to 8.6% of HCV negative group).