

SPECTRUM OF HCV POSITIVE CASES IN A GYNAE UNIT

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SUMMARY

352 gynae patients admitted to Gynae A Unit LRH were screened for Hepatitis C Virus (HCV). Out of which 20 were found to be positive (5.1%). Most of them were above 40 years of age and grand-multiparas. Previous history of surgery, Dilation and curettage (D&C, E&C), blood transfusion and contraceptive injections was established. As no vaccine is available and treatment with interferon and ribavirin is associated with serious side effects, therefore, early recognition of infective patients and preventive measure to reduce the risk of transmission to others is important.

INTRODUCTION

Infection with Hepatitis C virus is a matter of great concern all over the world particularly in the third world countries. World Health Organization estimated that about 170 million people, 3% of the world's population, is infected with HCV and are at risk of developing cirrhosis and/or liver cancer¹. Hepatitis C is an indolent disease, extending over many years. Acute attack is unrecognized and has no clinical features. Some time discovered only by routine serological or biochemical testing. However the infection with HCV tends to become persistent and 70-90% of infected individuals fail to clear the infection². HCV is responsible for serious consequences for the

afflicted persons especially in terms of chronicity for liver disease, hepatic failure and development of hepatocellular carcinoma. As confirmed through various studies the Hepatitis C virus is transmitted through parental routes including blood transfusion, drug abuse, non-disposable needles/syringes, traditional healing techniques involving puncture of skin, tattooing, transplantation of infected organs and infected surgeon.

The risk of contracting the virus is high in health care professionals especially those exposed to needle stick injuries⁴. Keeping in view the severity of the disease we started screening all patients admitted in Gynae A unit from September 2001–February 2002 for Major gynecological surgery.

MATERIAL AND METHODS

Postgraduates Medical Institute Lady Reading Hospital is one of the oldest and largest hospitals of North West Frontier Province. Complicated medicated, surgical and gynecological cases from all over the province as well as from Afghanistan are referred here for management. All patients with gynaecological problems admitted in Gynae A unit for major surgery from Sept 2001-Feb 2002 were screened for hepatitis B & C. Detailed information was taken only from those cases which turned out positive on screening. Out of 352 patients 20 cases were positive for antibodies to hepatitis C and 5 were positive for hepatitis B. In HCV positive cases active viremia was confirmed by PCR reaction. LFT was done in all cases to know the extend of liver damage. All the patients were examined by physician and started on interferon and ribavirin therapy for 3-6 months.

RESULTS

Out of 20 HCV positive cases 5 patients were less than 30 years of age. Seven were 40 years and eight were more than forty years. Ten patients were grandmultiparas while primi and multipara were three each. Four patients were unmarried. Majority of the patients was asymptomatic. There was past history of jaundice in three and tooth extraction in one patient where as in 50% of patients there was history of previous

FREQUENCY DISTRIBUTION OF SUBJECTS OVER VARIOUS AGES GROUPS

Age groups	N = 20	%
21 - 40 years	12	60%
41 - 60 years	4	20%
61 - 80 years	4	20%

TABLE-1

FREQUENCY OF MOST COMMON ETIOLOGICAL FACTORS ASSOCIATED E HCV INFECTION

Previous History	N = 20	%
Jaundice	3	15%
Blood transfusion	5	25%
Injections	3	15%
Surgery	9	45%
Drug Abuse	0	0%
Multiple Sexual Partners	0	0%

TABLE-2

surgery and/or blood transfusion. There was past history of. Surgical procedures like diagnostic D&C, cautery cervix, A/P repair, umbilical hernia repair and appendectomy in 8 cases. Blood transfusion was done in 6 cases. Parental transmission of infection is a well-recognized route of transmission of this infection but a remote possibility of transmission from infected surgeon also exists. There was history of injections in 3 cases. There were no patient with the history of drug abuse or multiple sexual partners. All the patients were anemic with hemoglobin range from 6.4-11.6 gm/dl. Blood urea and sugar were normal in all cases. HbsAg was positive in five patients. Serum bilirubin was less than 1 mg/dl in all cases. SGPT and ALP were raised in four cases. PT and APTT were double than the control in four patients. Results of X-ray chest, ECG, and urine examination were normal in all cases. Ultrasound examination showed coarse echo shadow of liver in one patient.

This study based on hospital admitted cases reflects the following aspects of HCV infections.

- The study showed that most of the women came from underdeveloped areas with poor socioeconomic histories. Most of them belonged to overcrowded, poor hygiene and bad sanitation drainage areas.

- The other important factor revealed that age wise most of the ladies fall in to the age group of forty plus. Seven women were forty years old, four were forty five years and three were sixty eight. The demographic distribution according to the age is very similar to that reported by Khan⁵.
 - Although this study was not conducted on pregnant woman but most of the patients were grandmultiparas therefore there is a high risk of vertical transmission as well as risk to the husband. Thus suggesting the need for more wide spread screening. The presence of anti HCV has been demonstrated in 11% to 35% of spouses of HCV infected patients, significantly higher than in other family members and the general population.^{6,7}
 - Six of the women were admitted with the diagnoses of dysfunctional uterine bleeding and on investigation turned to be HCV positive. Their dysfunctional uterine bleeding can be explained on the basis of systemic involvement as proved by their impaired liver function test Thus affecting their coagulation profile.
 - Three of the women had the history of contraceptive injection in the past. As the use of unsterilized injections is one of the important causes of HCV and Hepatitis B infection,^{8,9} thus the emphasis should be on training the family planning staff and health education of the women using injection as the choice of contraception.
 - The study showed that the eight women and undergone surgery in the past. Five of them had D&C or E&C. Most of the D&C are carried out by unqualified health workers under unhygienic conditions, which is one of the most serious and grave situations and thus needs to be readdressed.
 - Our study also revealed that almost all the woman were anemic. Their hemoglobin level was in the range of 6.4-11.8 gm/dl. Five women had history of blood transfusion in the past. It may be assumed that they were advised blood transfusion to cover up their anemia with out proper screening of the blood transfused. Which is one of the major cause of HCV as reported internationally,¹⁰ therefore it is recommended than anemia in women may be treated initially with iron supplementation that is oral + injectable (Jectifer, venofer) and if blood transfusion is required it should only be transfused after it is properly screened.
- The prevention of HCV is aimed at primary prevention based on early recognition of infective patients and preventive measures to reduce the risk of transmission to others. At present no vaccine is available for HCV. Post exposure prophylaxis with immunoglobulins does not appear to be effective. Treatment with antiviral interferon is association with serious side effects like hearing impairment¹¹. All we have to rely upon is to educate health professionals and the general population about potential risks involved in the transmission of the disease.

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