

RELATIONSHIP BETWEEN LICHEN PLANUS AND HEPATITIS C VIRUS

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The present study was conducted on 75 patients of lichen planus to observe the relationship of hepatitis C virus. Only 2 cases (2.66%) were positive for the hepatitis C virus antibody, which is almost parallel to the prevalence of hepatitis C virus in the general population in India (1.5 to 2.2%).

Key words : Lichen planus, Hepatitis C

Introduction

Lichen planus (LP) is a benign disease characterized histologically by a dense subepidermal lymphocytic infiltrate and a distinct clinical entity differentiating it from other dermatoses. It affects mostly middle aged adults and involves skin, hair, nails and mucous membrane. The exact etiology is unknown but current concepts on the pathogenesis includes genetic, immunological or infective factors.¹ An increased prevalence of chronic liver disease has been reported in patients with LP.² Divano et al³ reported anti hepatitis C virus antibody in 50% of patients with LP having chronic liver damage and they thought that virus might be responsible for initiating this type of autoimmune condition. In view of this observation anti HCV antibody was studied.

Materials and Methods

In the current study 75 patients with his-

tological confirmation of LP were investigated for anti - HCV antibodies by enzyme linked immunosorbent assay (ELISA) test and liver function tests. Thirty age and sex matched healthy controls were also investigated.

Results

Only 2 cases (2.66%) out of 75 patients with lichen planus, histologically confirmed showed positivity for hepatitis C virus antibody by ELISA test. Out of 2 cases one was of classical type LP and other follicular type of LP. Both the cases were males in the age group of 4th and 5th decade respectively. Liver function test of the positive lichen planus (classical type) cases showed mildly raised SGOT level while the other did not show any abnormality. None of the age and sex matched healthy controls showed positive ELISA for HCV or any abnormality of liver function tests.

Discussion

Several studies have described a high prevalence of hepatitis c virus infection in pa-

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tients with LP.^{4,6} Majority of these reports are from Western countries and no such data is available from India. Association HCV antibody in

of the patients by Tanei et al.⁶

Although cases of LP associated HCV infection has been described, the association between the two diseases had not been established because the geographical origin of patients could be an important factor in HCV prevalence in patients with L P. In India the prevalence of HCV in general population is reported to be 1.5% to 2.2%.^{7,8} Association of HCV with LP in 2.66% cases in our present study is almost parallel to the prevalence of HCV.

Table I. Reports of associations of lichen planus and hepatitis C virus

Authors	Year	Country	Incidence of HCV in Lichen Planus
Divano et al ⁹	1992	Italy	10%
Cribrier et al ⁷	1994	France	3.8%
Rebora et al ¹⁰	1994	Italy	23%
Perez et al ⁴	1995	Spain	20%
Tanei - R et al ⁶	1995	Japan	37.8%
Bellman et al ⁷	1996	U.S.A	23%
Present study	1997	India	2.66%

lichen planus was reported to vary from one geographical to another^{4,5} ranging from 4% to 38% (Table I). In the present study the association of hepatitis C virus with LP was observed in 2.66% of cases. The association was observed in males in the 4th to 8th decade as compared to 7th and 8th decade and women were twice as often affected as men as reported by Perez et al⁴ and equal in both male and female as reported by Tanei et al.⁶ This difference in presentation could be explained on the basis of regional variation.

Perez et al⁴ and Imhof et al⁵ reported 16 of the 78 (20%) patients and 13 of the 84 (16%) patients had anti HCV antibodies respectively which is statistically significant. Imhof et al⁵ also reported 12/13 anti HCV positive patients were viraemic as assessed by presence of HCV RNA i.e. high prevalence of HCV RNA in patients with LP thus suggested an etiological role of HCV in pathogenesis of L.P.

In our study only one case of hepatitis C virus related classical LP showed mild raised SGOT level. Elevated transaminase levels in hepatitis C virus related LP were observed in most

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