Original Article

Survey of relationship between hepatitis C and lichen planus among dermatology outpatients of Imam Hospital of Ardabil city

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Abstract

Background Lichen planus is classified as a common and chronic papulo-squamous disease. It has been associated with liver disease particularly hepatitis C virus (HCV) infection, in several studies. This study aimed to evaluate the controversial relationship between HCV infection and lichen planus.

Patients and methods This was an analytical case-control study. The study included 60 patients with pathologically confirmed lichen planus and 60 volunteer blood donors as control group. Enzyme-linked immunosorbent assay (ELISA) was employed to detect anti-HCV antibodies and hepatitis B surface antigen (HBsAg). Finally, the gathered data were analyzed by SPSS software and t pair test method.

Results 53.3% of patients were female and 46.7% were male. The most common observed form of lichen planus was classic one (57.7%). One case of 60 lichen planus patients was HCV antibody-positive (1.7%) and no case with positive HCV Ab was observed in control group (p = 0.63). HBS antigen was positive in one case (1.7%) in control group, whereas none of lichen planus patients was HBS antigen positive (p = 0.76). Liver function tests (LFT) were raised twice than normal in one case of 60 LP (1.7%) and normal in all control subjects. There was no significant difference between two groups in profile of HCV Ab and HBsAg and LFT.

Conclusion These findings indicate that investigation for HCV infection should not be necessarily performed in all patients with LP. It is recommended that further studies should be performed with focus on larger population in other regions of Iran particularly in some border regions with high prevalence of HCV infection, to determine whether testing the HCV infection is necessary in patients with lichen planus or not.

Key words Lichen planus, hepatitis C, hepatitis B.

Introduction

Lichen planus (LP) is a common, pruritic, inflammatory disease of skin, mucous membrane, and hair follicles. It occurs throughout the world in all races. It may be familial in 1% to 2% of cases. Incidence in both sexes is equal. It appears in men at a constant rate from the early 20s through the 60s, whereas in women the rate of new cases continues to increase with increasing age, reaching a peak in the 60s.

LP is characterized by an immunologic reaction mediated by T cells. These cells induce keratinocytes to undergo apoptosis by an unknown mechanism.

Epidemiological relationship between LP and hepatitis C virus has been reported. In studies from Italy, Central part of France, Spain, Japan and Pakistan and HCV RNA is isolated.