Hepatitis C Virus-infected Patients with Persistently Normal Alanine Aminotransferase Levels whose Platelet Count less than 150,000 $/\mu$ L and whose Age over 55 Years Old should be Recommended Antiviral Therapy

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Abstract: Background and aim: There have been still controversies whether hepatitis C virus (HCV) -infected patients with normal alanine aminotransferase (ALT) levels should require antiviral therapy. The aim of this study is clarify antiviral therapeutic adaptation according to histological findings and evaluated antiviral therapy retrospectively for HCV carriers with normal ALT levels (<40 IU/L).

Material and methods: Sixty HCV carriers with normal ALT levels were performed liver biopsy and evaluated by New Inuyama's classification, then 43 received peginterferon alpha-2b (PEG-IFN) plus ribavirin combination therapy. We assessed the relationships between each factors using statistical analyses. Results: Of the 60 subjects studied, 21 (35%) had moderate to severe fibrosis (over F2 stage). Compared the F0-F1 group and the F2-F3 group, Age; over 55 years old (p=0.0191, odds ratio=5.26, 95% confidence interval (CI) =1.40-23) and platelet count; less than 150,000 / μ L(p=0.0152, odds ratio=5.05, 95% CI=1.41-20) were the strong predictable factors in the multivariate logistic regression analysis. Whereas PEG-IFN plus ribavirin combination therapy was performed for 43 patients, sustained virological response (SVR) was achieved in 33.6% (12/33) with genotype 1b, and in 70% (7/10) with genotype 2a/2b. The most important factor to achieve SVR was HCV RNA undetectable within 12 weeks after beginning of the combination therapy (early virological response; EVR: p=0.02, odds ratio=12.1, 95% CI=2.1-126) in the multivariate logistic regression analysis.

Conclusions: According to this current study, HCV carriers with normal ALT levels whose age is over 55 years old and platelet count is less than $150,000 / \mu L$ should be recommended with antiviral therapy.

Key words: Chronic hepatitis C, Normal serum ALT levels, Peginterferon plus ribavirin combination therapy, Early virological response