中文題目:以長效型干擾素及 Ribavirin 治療慢性 C 型肝炎病毒感染之血中維生素 D 濃度的變化

英文題目: Serum Vitamin D Levels Change during Therapy with Pegylated Interferon-alfa plus Ribavirin for Chronic Hepatitis C Virus Infection

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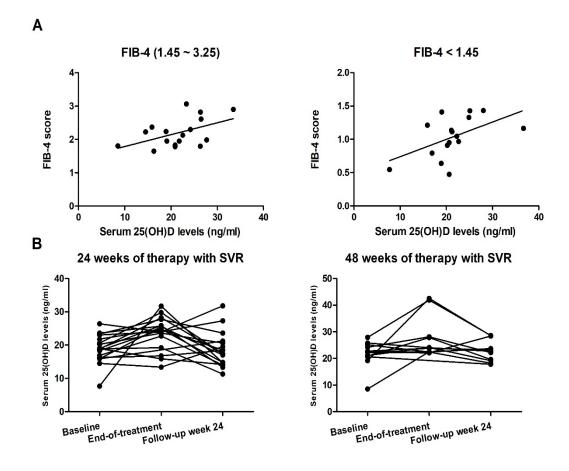
**Background:** The controversy of the effect of 25-hydroxyvitamin D [25(OH)D] status on the response to anti-hepatitis C virus (HCV) therapy remains. We analyzed the kinetics of 25(OH)D levels during antiviral therapy in a cohort of treatment-naïve patients with chronic HCV infection to predict whether influenced the rate of sustained virologic response (SVR) or not.

**Methods:** Forty-eight patients, with 24 or 48 weeks of pegylated interferon-alfa plus ribavirin therapy, were tested for serum 25(OH)D level before treatment, end-of treatment and after 24 weeks treatment.

**Result:** There was a significant correlation between 25(OH)D level and FIB-4 score in patients without severe fibrosis; FIB-4 score  $< 3.25 (r = 0.49 \sim 0.52, p < 0.05)$ . Thirty patients achieved SVR while eighteen did not. The mean serum 25(OH)D level was 20 ng/ml, with a prevalence of 25(OH)D level < 20 ng/ml and < 10 ng/ml of 43% and 6%, respectively. On treatment, the mean increased 125% (compared with baseline) in patient with SVR and decreased by the end of the 24-week follow-up period. The serum 25(OH)D levels in patients with virologic relapse were not change during the treatment (Figure 1).

**Conclusions:** Measuring 25(OH)D levels during antiviral therapy in HCV patients may predict SVR. Our data raise the possibility that higher vitamin D levels may be associated with fibrosis progression and suggest a minimal role for vitamin D supplementation in patients with chronic HCV infection.

**KEY WORDS**: HCV infection; serum 25(OH)D; sustained virological response



**Figure 1**. (A) Correlation between serum 25(OH)D levels and FIB-4 score. (B) On-treatment change of 25(OH)D levels during antiviral therapy.