ABSTRACT

Background

Vitamin D is an important hormone with effects on calcium metabolism. Recently studies are focused towards its immunomodulatory effect like cell proliferation and differentiation, insulin resistance. Vitamin D deficiency has been associated with the pathophysiology of NAFLD and CHC virus infection.

Aims and Objectives

To estimate 1) Vit-25(OH)D level in patients with various types of chronic liver disease. 2) To study the clinical correlation of chronic liver disease patients with hypovitaminosis-D. 3) To study the prevalence of vitamin D deficiency in chronic liver disease patients

Materials and methods

Study was done by cross-sectional method. Study period was 6 months. Study was conducted in Royapettah Hospital attached to Govt. Kilpauk Medical College, a tertiary health care centre. Study population includes 55 CLD patients admitted in wards of department of General Medicine. Data will be analysed to study the clinical correlation of chronic liver disease patients with hypovitaminosis-D.

Results

In our study totally 55 patients were studied. 21.8% were females and 78.2% were males showing the increasing trend of females having chronic liver disease. In our study 60% have insufficiency and 15% have vitamin D deficiency and 72.7% have normal vitamin D levels. In alcoholic group 27 patients were having insufficient
levels. 12 were having deficient levels and 4 were having normal levels. There was significant association between low vitamin D levels, MELD and CHILD PUGH score.

**Conclusion**

We observe a strong association between the low vitamin D levels and chronic liver disease severity progression. There is a strong association between low vitamin D levels and child pugh score. There is a strong association between low vitamin D levels and MELD score. Further interventional studies by pre and post vitamin D supplementation of chronic liver disease patients will help in treating these chronic liver disease patients in future.

**key words**

Vitamin D level, chronic liver disease, model for end stage liver disease, child pugh score, chronic hepatitis C virus infection, insulin resistance.