Prevalence of Vitamin B1 (Thiamine) Deficiency in Patients with Alcohol Use Disorders in Vajira Hospital

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**Background:** Alcohol related disorder (alcohol abuse, alcohol dependence with withdrawal, alcohol dependent with alcohol-induced psychotic disorder) is a public health issue, which takes vitamin B1 or thiamine supplement for prevent neurological disorder of alcohol, such as Wernicke’s encephalopathy, Korsakoff’s amnestic syndrome. But now we do not know how much or how long of vitamin B1 (Thiamine) to supply.

**Objective:** This research aimed to evaluate prevalence of Vitamin B1 (Thiamine) deficiency in patients with alcohol use disorders in Vajira Hospital.

**Methods:** A cross-sectional descriptive study was conducted to evaluate the prevalence of vitamin B1 (Thiamine) deficiency in patients with alcohol use disorders in Vajira Hospital. We enrolled patients aged 18 and over with alcohol related disorders (alcohol abuse, alcohol dependence with withdrawal, alcohol dependent with alcohol-induced psychotic disorders) and admitted in Vajira hospital (n=68). We excluded patients with head trauma or cerebral hemorrhage from CT brain. Erythrocyte transketolase activity test was used to determine prevalence of Vitamin B1 (Thiamine) deficiency in patients with alcohol use disorders in Vajira Hospital and identify the relationship between vitamin B1 deficiency and factors such as age, sex, amount of alcohol drinking, nutritional status, and liver function test.

**Results:** This study showed that most patients with alcohol related disorders (alcohol abuse, alcohol dependence with withdrawal, alcohol dependent with alcohol-induced psychotic disorders) had vitamin B1 (Thiamine) deficiency, but independent factor to predict vitamin B1 (Thiamine) level was pending.

**Conclusion:** Vitamin B1 (Thiamine) level is almost deficiency in patients with alcohol related disorders (alcohol abuse, alcohol dependence with withdrawal, alcohol dependent with alcohol-induced psychotic disorders) in this study, but independent factor to predict vitamin B1(Thiamine) level is pending.

**Keywords:** Thiamine deficiency, Alcohol use disorder, Erythrocyte transketolase activity test