

Association between Serum Uric Acid Level and Diabetic Peripheral Neuropathy in Type 2 Diabetic Patients

Dr Aung Kyaw Swar Myint¹, Dr Theingyi Kyaw¹

¹*Department Of Endocrinology And Metabolic Diseases, (NO.2) Military Hospital (500-bedded), Yangon, Myanmar*

Aim: Aim of the dissertation was to study association between serum uric acid level and diabetic peripheral neuropathy in type 2 diabetic patients.

Objective: Two main objectives of the study were to detect the proportion of high serum uric acid level among diabetic patients and to find out the association between serum uric acid level and diabetic peripheral neuropathy (DPN).

Materials and Methods: Sixty-one type 2 diabetic patients were enrolled over all type 2 Diabetic patients who admitted to medical wards. After excluding the patients who did not meet the criteria, the enrolled patients were divided into two groups: "with diabetic peripheral neuropathy"(40 patients) and "without diabetic peripheral neuropathy"(21 patients) according to NDS and NSS scores. Blood tests for serum uric acid level were sent for all enrolled patients and compared between two groups.

Results: The comparison of DPN according to age groups showed no significant association between age and DPN ($p=0.399$). Other variables like gender and duration of diabetes also showed no association ($p=0.596$ and $p=0.318$ respectively). But meaningful correlation of DPN with high BMI ($p=0.04$) and high serum uric acid level ($p=0.003$) were seen in this research.

Conclusion: According to this study, high serum uric acid level can be regarded as a predicting risk factor for DPN.

Recommendation: Further studies are therefore required to better assess the prevalence and the characteristics of high serum uric acid level among type 2 diabetic patients with DPN.