PP-D-31

RELATIONSHIP BETWEEN CARDIAC AUTONOMIC NEUROPATHY AND PLASMA HOMOCYSTEINE LEVEL IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

https://doi.org/10.15605/jafes.038.AFES.100

Chan Nyein Latt,[1] Theingi Kyaw,[2] Phyo Maung Maung Min,[1] Myo Thiha Zaw,[3] Thet Naing[2]
[1]*No. 2 Defence Services General Hospital 1000 bedded, Naypyitaw, Myanmar*
[2]*No. 1 Military Hospital 700 bedded, Pyin Oo Lwin, Myanmar*
[3]*Defence Services Medical Research Centre, Myanmar*

INTRODUCTION
Cardiac Autonomic Neuropathy is one of the diabetic complications that can lead to silent myocardial infarction, arrhythmia, and sudden death. Hyperhomocysteinemia was associated with macro- and microvascular complications of diabetes mellitus, including cardiac autonomic neuropathy.

METHODOLOGY
The study aimed to investigate the relationship between cardiac autonomic neuropathy and plasma homocysteine levels in patients with type 2 diabetes mellitus. Ninety-six patients with type 2 diabetes mellitus were included in this cross-sectional analytical study. Plasma homocysteine was measured by Cobas C311 analyzer. Diagnosis of cardiac autonomic neuropathy was based on Ewing's test and categorized into early CAN, severe CAN, and patients without CAN by using Bellavere's scoring system.

RESULTS
Among the patients, the majority (71.9%) did not have cardiac autonomic neuropathy (score <2). In those with cardiac autonomic neuropathy, early autonomic neuropathy (scores 2-4) was found among 24% of patients. Severe autonomic neuropathy (scores 5-10) was noted among 4.1% of patients. The mean ± SD level of plasma homocysteine was 14.08 ± 5.29 μmol/L. The range was from 4.24 to 28.21 μmol/L.

The mean ± SD level of plasma homocysteine level of patients without CAN was 11.84 ± 3.59 μmol/L. Among patients with CAN, the mean ± SD level of plasma homocysteine level of patients with early CAN was 19.88 ± 4.76 μmol/L while that of patients with severe CAN was 19.42 ± 4.13 μmol/L.

Post hoc comparison using the Tukey HSD test indicated that the mean values of plasma homocysteine levels for early CAN and severe CAN patients were significantly different from the mean values of plasma homocysteine levels for patients without CAN, with p <0.001 and 0.001 respectively.

In this study, older patients were more likely to develop CAN. CAN was detected more frequently among male patients. Smoking status, hypertension, and HbA1c level were not associated with CAN. Patients suffering from DM for more than 5 years were 2.75 times more likely to have CAN than patients with DM for less than 5 years. This finding was statistically significant with p = 0.034.

CONCLUSION
In this study, there was a relationship between cardiac autonomic neuropathy and plasma homocysteine level in patients with type 2 diabetes mellitus. To reduce the cardiovascular complication of cardiac autonomic neuropathy, early CAN diagnosis is useful to establish an adequate therapeutical strategy for glycaemic control and personalized treatment.

KEYWORDS
cardiac autonomic neuropathy, homocysteine, type 2 diabetes

PP-D-32

FULL TABLET AND HALF TABLET EMPAGLIFLOZIN PRESCRIPTION DEMOGRAPHIC AND GLYCEMIC CONTROL: A SINGLE CENTRE EXPERIENCE

https://doi.org/10.15605/jafes.038.AFES.101

See Chee Keong, Nurbadriah Jasmiad, Ilham Ismail, Tan Eileen, Ong Poh Yeong, Wong Zhe Lan
Hospital Sultan Haji Ahmad Shah, Temerloh, Pahang, Malaysia

INTRODUCTION
Sodium-glucose co-transporter 2 (SGLT2) inhibitors prescription has been given greater emphasis in recent years, and it has been adopted as a first-line or second-line treatment in major international guidelines. In the public practice of the Ministry of Health hospital, the main SGLT2 inhibitor prescribed is empagliflozin. However, the prescription is still limited by cost despite efforts to increase prescription. The practice of prescribing half tablet empagliflozin (12.5 mg) has yet to be recommended but has been widely practiced in many centres in Malaysia. There is no evidence advising for or against this practice. Hospital Sultan Haji Ahmad Shah (HoSHAS), a tertiary hospital in Central Pahang, has initiated a prescription of half a tablet of empagliflozin (12.5 mg) in 2019. An assessment of this empagliflozin prescription pattern and its effects on glycemic control is essential to inform future prescription direction.