

Abstract Submission No. : 2028

Risk Factors for Intradialytic Hypotension during Hemodialysis among the End-stage Renal Disease Patients with Pre-existing Autonomic Dysfunction

Thanawat Vongchaiudomchoke

Department of Internal Medicine-Nephrology, Lampang Hospital, Thailand

Objectives:

The primary objective of this study aimed to determine the prevalence of intradialytic hypotension (IDH) in hemodialytic patients with pre-existing autonomic dysfunction (AD). The secondary objective was to identify associated factors of IDH in those patients.

Methods:

Retrospective chart of 48 hemodialytic patients with autonomic dysfunction verified by the heart rate variation during deep breathing test in Lampang Hospital between May to August 2019 were reviewed. The patients were categorized into two groups according to Nadir90 criteria; patients with IDH and patients without IDH. Baseline characteristics and dialysis profiles were statistically compared between groups and the associated factors for intradialytic hypotension were determined by regression analysis.

Results:

With respect to Nadir90 criteria, the prevalence of IDH in patients with pre-existing autonomic dysfunction was 37.5% (18 of 48). IDH group had higher age (65.7 ± 9.8 vs 58.3 ± 12.6 years, $p=0.038$), lower percentage of patients receiving hydralazine medication (38.9% vs 73.3%, $p=0.032$), lower predialysis systolic blood pressure (124.1 ± 22.3 vs 140.3 ± 17.7 mmHg, $p=0.008$) and lower serum albumin (3.5 ± 0.5 vs 3.8 ± 0.2 g/dl, $p=0.009$) compared to the non-IDH group. The multivariate regression analysis revealed that hypoalbuminemia was a significant risk factor (RR 2.88, 95% CI 1.01-8.25, $p=0.049$).

Conclusions:

The prevalence of IDH was 37.5% among the patients with pre-existing autonomic dysfunction. Serum albumin less than 3.5 g/dl associated with an increased risk of IDH.