

Assessing the impact of obesity on survival and outcomes in patients initiating unplanned dialysis

Chu Hong Tang¹, Kar Wah Fuah¹, Azhani Akmar Azhar¹, Li Lian Tay¹, Aida Azlin Alias¹, Christopher Thiam Seong Lim², Fairol Huda Ibrahim¹, Bak Leong Goh¹

Department, Hospital Sultan Idris Shah, Serdang, ²Nephrology Unit, Department of Medicine, Hospital Sultan Abdul Aziz Shah, Universiti Putra Malaysia, Selangor, Malaysia

ABSTRACT

Introduction: Observational studies have shown obesity improved survival in end-stage kidney disease (ESKD) population, known as the obesity paradox. The relevance of this paradox in patients undergoing unplanned dialysis is unclear. This study aims to investigate outcomes for obese patients who had unplanned dialysis start. **Materials and Methods:** We performed a retrospective cohort study on patients who initiated hemodialysis (HD) via uncuffed internal jugular catheters (IJC) and chose HD as their long-term therapy at HSIS Serdang from January 2022 to December 2022. Data were collected through EHIS and followed up for one year. SPSS Statistics 26.0 was used for analysis. Obesity was defined as body mass index (BMI) > 25 kg/m² according to Asia Pacific guidelines. **Results:** The study comprised 87 patients with a mean age of 53 ± 13.4 years. Among them, 50 patients (57.4%) were classified as obese, with a median BMI of 29.9 ± 5.2, compared to 21.4 ± 2.5 in non-obese patients. There was no significant difference in the number of attempts to secure IJC between the groups. The rate of catheter related bloodstream infections (CRBSIs) was higher in the obese group (28%) than in the non-obese group (19%). Arteriovenous fistula (AVF) success rates were slightly higher in the non-obese group (60%) compared to the obese group (56%). Mortality rates were slightly higher in the obese group (34%) compared to the non-obese group (27%). However, these differences were not statistically significant. **Conclusion:** Our study found no significant differences in survival or other outcomes between obese and non-obese patients undergoing unplanned dialysis. Plausible explanations attributed to small sample size and potential confounding factors like volume overload, anemia, and uremic toxicity which could have more substantial impact on mortality. Further research with larger cohorts is needed to better understand the complex relationship between obesity and outcomes in this population.