

Urgent haemodialysis patients at a tertiary center: Clinical profile and prognosis

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

¹Department of Nephrology, Hospital Sultan Idris Shah Serdang, Malaysia, ²Nephrology Unit, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Malaysia

ABSTRACT

Introduction: Patients with end-stage kidney disease (ESKD) who present acutely and require urgent haemodialysis (HD) through uncuffed internal jugular catheters (IJC) are often referred to as "crashlanders." This group faces high morbidity and mortality rates. Our study aims to explore the clinical features and outcomes of crashlanders at our institution. **Materials and Methods:** We conducted a retrospective cohort study of crashlanders admitted to HSIS Serdang from January 2022 to December 2022. Data was gathered from the EHIS system and followed up for one year. Analysis was performed using SPSS Statistics 26.0. **Results:** Our cohort included 87 patients with a mean age of 53 ± 13.4 years; 57% were male and 70% were Malay. Predominant comorbidities were hypertension (91%), diabetes mellitus (76%), ischaemic heart disease (26%), and stroke (13%). The majority (83%) had right-sided uncuffed IJC placements. Over the one-year follow-up, 38% of patients required multiple catheter insertions. Within a year, 69% had an arteriovenous fistula (AVF) created, with a success rate of 56%. Only 18 patients (21%) had cuffed catheter insertion over a year. Catheter-related bloodstream infections (CRBSI) occurred in 24% of patients, with 5% experiencing multiple episodes. There were 27 deaths (31%), primarily due to cardiovascular causes (16%), infections (9%), and ESKD (6%). **Conclusion:** Crashlanders experience significant challenges, with high rates of morbidity and mortality. Our findings indicate that a quarter of patients suffered from CRBSI and one-third died within a year. Contributing factors include a high prevalence of diabetes mellitus, the catastrophic presentation to healthcare facilities, prolonged use of uncuffed catheters, and a low rate of pre-dialysis AVF creation. These results highlight the critical need for timely kidney replacement therapy planning and early referral for vascular access in managing ESKD.