

Patient awareness and complications of arteriovenous fistula created for haemodialysis access: A case series

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Haemodialysis is a lifesaving renal replacement therapy for End Stage Renal Failure which represents a growing health burden in Sri Lanka. Arteriovenous fistula (AVF) is the preferred long-term vascular access due to lower complication rates compared with alternatives, but complications such as stenosis, thrombosis, and infection remain significant. Patient awareness and adherence to self-care practices can reduce complication severity, improve quality of life, and ease healthcare demands. Local studies on AVF-related complications and awareness are scarce. The aim of this study was to determine the proportion of AVF complications and assess awareness and self-care practices related to AVF among haemodialysis patients at the National Hospital of Sri Lanka (NHSL). A descriptive cross-sectional study was conducted among 120 haemodialysis patients at the NHSL in August 2024. Data on patient demographics, comorbidities, AVF history, awareness, and practices were collected via an expert-validated, interviewer-administered questionnaire. Awareness and practices were graded as good, satisfactory, or poor. Statistical analysis on SPSS used frequencies, proportions, and chi-square tests for associations. Mean participant age was 49.9±14.1 years; 73.3% were male. Hypertension (73.3%) and diabetes mellitus (66.7%) were the leading causes of renal failure. Increased venous pressure (68.3%) was the most common intradialytic complication; infections (14.2%) and thrombosis (8.3%) were the leading AVF-related complications. Overall, 65.0% demonstrated good awareness on AVF related complications and 70.0% demonstrated good self-care practices; poor awareness and practices were observed in 15.0% and 7.5%, respectively. Mean awareness and practice scores were 11.96 out of 16 and 9.29 out of 12. Better awareness was significantly associated with age 35–65 years but not with education or gender. AVF complication prevalence was 28.33%, with infections being the most frequent. Good awareness correlated with better self-care practices. Enhanced comorbidity control and targeted patient education are recommended to optimize AVF outcomes.

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