

WCN25-AB-3190**Addressing the Failure of Arteriovenous Fistulas at the Nephrology and Hemodialysis Department of a Sub-Saharan Tertiary Hospital: A Critical Clinical Audit**Bonzi Y Juste¹, Dah Daniel², Coulibaly Gérard¹¹Nephrology and hemodialysis department, Yalgado Ouedraogo Teaching Hospital; ²Nephrology and hemodialysis department, Tenkodogo Regional Hospital**INTRODUCTION**

AVF failures are frequent in hemodialysis patients. Several factors are associated with their occurrence. We aimed to conduct a clinical audit of arteriovenous fistula failures for hemodialysis in a nephrology practice setting in Sub-Saharan Africa.

METHODS

This was a clinical audit carried out from January 1, 2021, to December 31, 2022, on patients treated with iterative hemodialysis who were at least 16 years old and had at least one arteriovenous fistula created, regardless of the timing. Data were analyzed using Stata software version 16. Multiple logistic regressions were employed to analyze associated factors. We obtained authorization from the hospital's general management for this survey.

RESULTS

208 AVFs in 193 patients, including 113 men (58.55%), resulted in a sex ratio 1.52. The mean age was 44.86 ± 13 years. Twenty-four patients (12.44%) began chronic hemodialysis with an AVF. One hundred and seventy-five patients, or 90.67% at the time of our study, were dialyzed with a native AVF. One hundred and twenty-six patients (65.28%) had their first distal radiocephalic AVF. A total of 50 AVFs failed during the study period, of which 26 AVFs (52%) were primary failures and 24 AVFs (48%) were secondary failures. Among the 24 secondary-failure AVFs, thrombosis occurred in 18 (75%), with a mean lifespan of 60 months. CVC use and age over 65 negatively impacted AVFs. Female gender and vascular mapping had a positive impact on AVFs.

CONCLUSION

CVCs, age over 65, female gender, and mapping were associated with AVF failures.

Key Word: Clinical audit, AVF failures, chronic hemodialysis patients