

Factors Responsible for Fistula Failure in Hemodialysis Patients

Ahmed Saif Al-Islam

Lecturer of Vascular Surgery, Sohag University, Faculty of Medicine.

Background: Autogenous arteriovenous fistula (AVF) is regarded as the first and perhaps the best choice of vascular access in hemodialysis patients. Vascular access procedures and their subsequent complications represent major causes of morbidity, hospitalization, and cost for chronic hemodialysis patients.

Aim of the study: The main objective of this study is to identify risk factors for failure of autogenous arteriovenous fistulae which had successfully matured and were used for dialysis in hemodialysis patients.

Material and methods: Sixty selected cases of chronic renal failure patients who were referred for creation of AVF during March 2006 to April 2008 were operated upon to create AVF and followed up for two years.

Results: There are a total of 76 autogenous AVF performed for 60 patients. 32 (53.3%) of the procedures were the distal fistulas, followed by 25 (41.7%) cubital fossa fistula (proximal fistulas) and other sites fistulas were only 3 (5%). Hypertension was present in 24 (40%) of the patients, and diabetes was present in 11 (18.3%). 12 (20%) of the studied cases were overweight. HCV was found in 28 (46.7%) of the patients. 21 (35%) of patients have past history of fistula failure during their course of renal dialysis. Patients who developed AVF failure were significantly have lower hemoglobin levels and were more likely to have previous fistula failure.

Conclusion: Predictors of AV-fistula malfunction in our dialysis population were lower hemoglobin levels, previous fistula failure.

Key Words: Arteriovenous fistula, Hemodialysis, Vascular access, Fistula failure, Fistula thrombosis.