

Clinical Profile and Outcomes of Arteriovenous Fistula (AVF) percutaneous interventions for salvage

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Introduction: Arteriovenous fistulas (AVFs) are the preferred vascular access for hemodialysis in chronic kidney disease (CKD) patients. However, complications such as stenosis, thrombosis, and poor maturation often necessitate further evaluation and intervention. This study examines the clinical indications, anatomical sites, and outcomes of AVF related procedures.

Objective: To assess the age distribution, clinical indications, anatomical involvement, and outcomes of patients undergoing AVF related interventions.

Design: A retrospective review was conducted over 18 months using clinical records from a single tertiary care center, involving patients who underwent AVF evaluation or procedures.

Results: A total of 29 patients underwent fistulogram. The majority (31.0%) were in the 50–59-year age group, followed by 17.2% each in the 60–69 and 70–79 groups. Smaller proportions were observed in the 30–39 (13.8%), 20–29 (10.3%), and 40–49 (10.3%) age groups. Among the indications for fistulogram, the most common was reduced flow during hemodialysis (n=20, 69%), followed by primary non-maturing fistulas (n=6, 20.7%), thrombosis (n=2, 6.9%), and bleeding (n=1, 3.4%). The anatomical sites involved included the cephalic vein (n=12, 41.4%), cephalic arch (n=6, 20.7%), central vein (n=5, 17.2%), juxta anastomotic (n=4, 13.8%), and the basilic vein (n=2, 6.9%). Among the 12 cases with follow-up data, 9 fistulas were salvaged and now being used for hemodialysis. Two were not salvaged and one died before initiation.

Conclusion: AVF related complications remain a common barrier to effective hemodialysis in CKD patients. According to our study, reduced flow during hemodialysis was the common indication with the involvement of Cephalic vein in majority. We only have the follow-up data of 12 patients which is a major limitation. However, the usage of salvaged AVF access in 9 patients highlights a good interventional outcome. It is recommended to have a good surveillance program with the inclusion of occasional scans of fistulas to identify early patency issues and to intervene on time.

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Recurrent Renal Hemorrhage in Tuberous Sclerosis Complex: Successful Endovascular Management of a Segmental Renal Artery Pseudoaneurysm

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Background: Tuberous sclerosis complex (TSC) is a rare autosomal dominant disorder characterized by multisystem hamartomas, with renal angiomyolipomas (AMLs) being one of the most common and clinically significant manifestations. AMLs can grow rapidly and are prone to spontaneous hemorrhage, particularly in larger lesions or those associated with aneurysmal formation.

Case Presentation: We report the case of a 43-year-old female with a known history of tuberous sclerosis complex (TSC) and bilateral renal angiomyolipomas (AMLs). She had previously undergone selective angioembolization for a left renal hemorrhage. The patient presented again with symptoms of fatigue and presyncope. Clinical assessment and hematological investigations revealed acute anemia, with a hemoglobin level of 6.7 g/dL. CT angiography demonstrated a dilated segmental branch of the right renal artery with associated pseudoaneurysms and a perinephric