

## Physician - Vascular Access

[MEP-05]

### Surgical Approach to Brachial Arteriovenous Fistula Thrombosis: A Case Report

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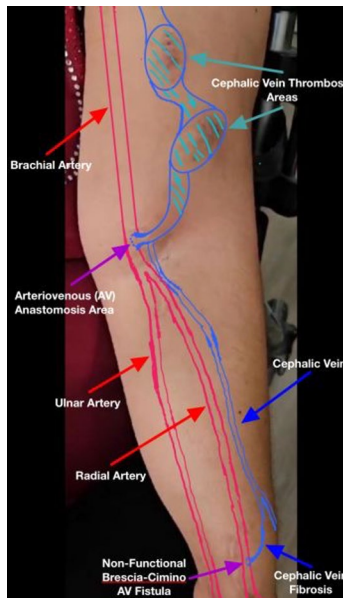
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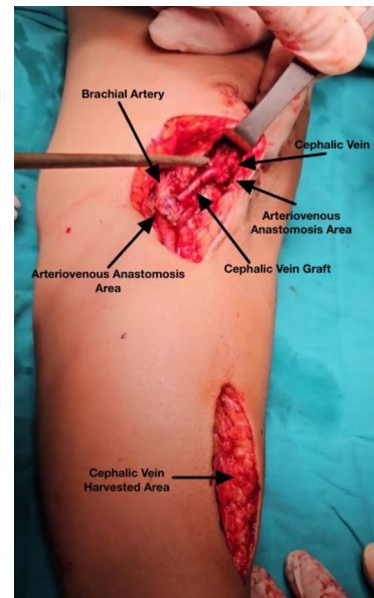
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For chronic hemodialysis patients to have long-term vascular access, arteriovenous (AV) fistulas are essential. Immediate intervention is necessary for AV fistula thrombosis, a common complication in hemodialysis patients. To guarantee the fistula's long-term patency, surgical thrombectomy is crucial. Vascular access should be preserved in cases with issues, according to the literature. This case report aimed to provide a literature review and surgical management of brachial AV fistula thrombosis in hemodialysis patients. A 41-year-old female patient who was on hemodialysis for three years due to chronic renal failure presented to the clinic. On physical examination, no thrill was obtained from the left brachial AV fistula. The patient underwent emergency surgery. After systemic heparinization, the cephalic vein was explored from two places, and thrombectomy was performed. The cephalic vein was harvested from the forearm and a bypass was performed from the brachial artery to the cephalic vein. The patient was discharged without any postoperative complications. During the follow-up, the fistula remained functional, and hemodialysis continued without any problems. Surgical thrombectomy allows early treatment of thrombosis and preserves the continuity of vascular access required for hemodialysis. Regular follow-up of patients is critical for early diagnosis and treatment of AV fistula thrombosis, improving the patient's quality of life and ensuring uninterrupted continuation of dialysis treatment. This case demonstrates that vascular access can be achieved with surgical thrombectomy and bypass application in a patient with brachial AV fistula thrombosis, highlighting the importance of surgical approach in the management of AV fistula complications.

**Keywords:** Arteriovenous fistula thrombosis, chronic kidney failure, renal dialysis, thrombectomy.



**Figure 1.** Schematic representation of cephalic vein thrombosis and nonfunctional Brescia-Cimino arteriovenous fistula.



**Figure 2.** Intraoperative view of arteriovenous anastomosis using cephalic vein graft for brachial artery repair.

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