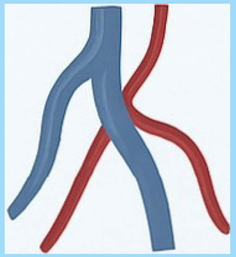

MANAGEMENT OF A NEPHROLOGY PATIENT IN THE EMERGENCY DEPARTMENT OF GENERAL HOSPITAL IN XANTHI WITH RUPTURE OF LEFT UPPER LIMB ARTERIOVENOUS FISTULA

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Introduction:

The arteriovenous fistula (AVF) remains the most common and reliable vascular access for hemodialysis in patients with end-stage renal disease (ESRD). Despite Its advantages, It may present complications, with rupture being among the most severe, as it can lead to acute hemorrhage and hemodynamic instability.

Aim:

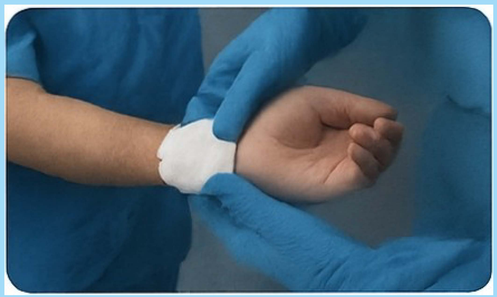
This case report aims to highlight the clinical management of an AVF rupture in a chronic hemodialysis patient, focusing on the Emergency Department (ED) approach.

Case Methodology:

A 59-year-old female with a history of an ESRD on thrice- weekly hemodialysis sessions presented to the Emergency Department of General Hospital Xanthi with active hemorrhage from a ruptured mature AVF of the left upper limb. Upon arrival the patient exhibited tachycardia, hypotension, and sighs of hemodynamic compromise.

Management:

Immediate manual compression was applied to the bleeding site, followed by the placement of a pressure dressing. Intravenous access was secured, fluid resuscitation was initiated, and laboratory investigations were obtained (hemoglobin, hematocrit, biochemical profile). The patient was urgently transferred to the surgical department, where surgical repair of the AVF was performed. A temporary central venous catheter was subsequently placed to ensure continuity of hemodialysis treatment.



Conclusion:

Rupture of an arteriovenous fistula, although rare, represents a life threatening complication that requires rapid and coordinated intervention in the ED. Prompt hemostasis, hemodynamic stabilization, and timely surgical repair are crucial for patient survival and the preservation of vascular access.

Patient education on fistula care and early recognition of warning signs, combined with staff vigilance, can significantly reduce morbidity and mortality associated with this emergency.