

**Abstract Submission No.: A-0441****Multi-Organ Recurring Thromboembolism Related to Anti-thrombin III and Protein C Deficiency in a Patient on Routine Hemodialysis****Bhanu Kumar**, Vika Wirdhani, Maruhum Bonar Marbun

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**Case Study :** Hemodialysis is one of the modalities available for end stage renal disease, however it also comes with serious complications such as increased risk of thrombus formation and bleeding. We are reporting a case of a 44-year-old man on chronic dialysis presenting with multiple manifestations of thrombosis. Patient had a history of uncontrolled diabetes and hypertension since 2018 and experienced worsening kidney function since early 2021. Hemodialysis was initiated since December 2021 using a brachiocephalic arteriovenous fistula. In May 2023 there was an unsalvageable malfunction in the arteriovenous fistula due to thrombosis and a tunnelled catheter was used onwards. A month later patient was readmitted with symptoms of dyspnea on effort and sharp pain along with edema in left lower extremity which worsened with movement and cyanosis in the distal extremity. Patient was treated with intravenous heparin, antiplatelets and underwent catheter directed thrombolysis of the left popliteal artery. Angioplasty showed multiple severe stenosis in the popliteal, anterior and posterior tibialis, and anterior peroneus artery with mild stenosis along the mid to distal superficial femoral artery. Angioplasty also revealed total Deep Vein Thromboses (DVT) in popliteal, anterior-posterior tibial and peroneus veins, partial DVT in common iliac, external iliac, and common femoral veins. Thoracic CT showed a single occlusive thrombus in the anterior segmental artery of the right lung along with multiple non-occlusive thrombus in various segments of both lungs. Laboratory results showed deficiency in Protein C and Antithrombin III levels. Patient was diagnosed with Chronic Thromboembolic Pulmonary Hypertension (CTEPH), pulmonary embolism, deep vein thrombosis, critical limb ischemia, protein C and antithrombin III deficiency. Hemodialysis was continued thrice weekly with regular heparin dose. Patient was discharged with oral anticoagulant and routine wound management. In conclusion, complete evaluation of coagulation factors and prompt management is required in hemodialysis patients with repeated vascular access thrombosis.