

## PP 2 - A Case Report: Traumatic Arteriovenous Fistula Following Femoral Line Insertion

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**Introduction:** Traumatic arteriovenous fistulas often remain undiagnosed for extended periods, only becoming evident when complications arise.

**Case presentation:** A 65-year-old female presented with dyspnea and intermittent claudication of the left thigh and calf. She had a history of abdominal hysterectomy with critical care stay 30 years ago, likely involving femoral line insertion. Echocardiogram showed severe pulmonary hypertension and preserved ejection fraction. Examination revealed bruit in the left iliac fossa and groin without any scar. CT angiogram (CTA) showed a superficial femoral artery-vein fistula, external iliac vein aneurysm, and dilated inferior vena cava. Surgical repair was planned after MDT discussion. Under spinal anaesthesia, retroperitoneal control of the external iliac artery was attempted but was difficult due to a large external iliac vein. Left groin was then explored, and control of the common femoral, superficial femoral, profunda femoris arteries and femoral vein was achieved. The fistulous tract was opened and repaired. Surgery was successful with the disappearance of the thrill and a favourable post-operative recovery.

**Discussion and Conclusions:** Prolonged critical care with probable femoral cannulation may have caused the AVF, though its location in the superficial femoral artery is slightly against. Here, AVF led to pulmonary hypertension, and steal syndrome with intermittent claudication. Chronic high-flow venous return caused an external iliac vein aneurysm. CTA confirmed the diagnosis, and surgical repair was preferred due to its location. Owing to pulmonary hypertension and poor tolerance to prolonged anaesthesia, the venous aneurysm was left untreated. This case underscores the need for timely diagnosis of AVFs.

**Keywords:** Arteriovenous Fistula, Pulmonary Hypertension, External iliac vein aneurysm