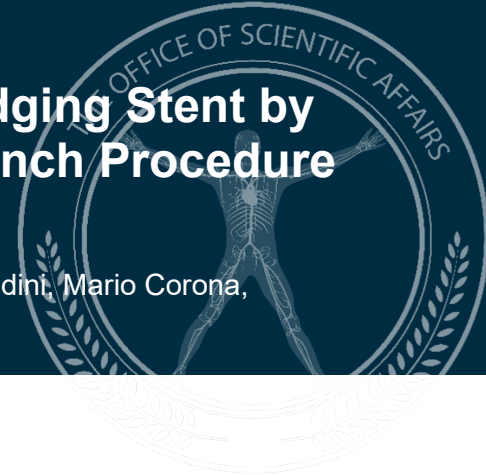


A Steerable Sheath to Deploy Hypogastric Bridging Stent by Contralateral Femoral Approach in an Iliac Branch Procedure after Endovascular Aneurysm Repair

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INTRODUCTION

Aneurysmal degeneration of distal landing zones after Endovascular Aneurysm Repair (EVAR) can lead to late procedural failure. This degeneration increases the risk of rupture of common iliac arteries and potential type Ib endoleaks due to reperfusion. Reintervention often involves covering the internal iliac artery (IIA) or using iliac branched devices (IBDs) to maintain antegrade flow. Traditional EVAR approaches (without a steerable sheath) typically require upper vascular access, which can be associated with significant complications.

Authors report a case of an IBD implantation for recurrent common iliac aneurysm, using a steerable sheath for IIA bridging stent deployment via contralateral femoral approach, in the setting of a preexisting bifurcated aortic endograft.

CASE BACKGROUND

Both femoral arteries were accessed percutaneously and a 10F 67 cm bidirectional steerable sheath was advanced from the contralateral side over the endograft bifurcation.

Due to stenosis at the origin of the IIA, percutaneous angioplasty was performed, and an expandable stent graft was deployed.

The procedure was completed without complications, ensuring aneurysm sealing while maintaining antegrade flow into the IIA.

Follow-up at 30 days and 6 months post-operation revealed complete exclusion and initial shrinkage of the aneurysm.

DISCUSSION

- Contralateral femoral access minimizes the risk of complications typically associated with upper access.
- EVAR is associated with lower perioperative mortality compared to traditional surgical repair; however, it also presents higher reintervention rates.
- Traditional approach of extending the iliac limb into the external iliac artery by embolization and overstenting the IIA carries risks, therefore preserving flow to at least one IIA is recommended whenever possible.

KEY TAKEAWAYS

The authors utilized a steerable sheath to enhance the safety of the contralateral femoral approach by preventing the distal migration of the existing bifurcated endograft. The system allowed them to guide a bridging stent from the contralateral side into the target vessel without applying any traction on the aortic endograft flow divider.

Technical challenges of the technique include the limited total length of the steerable sheaths.