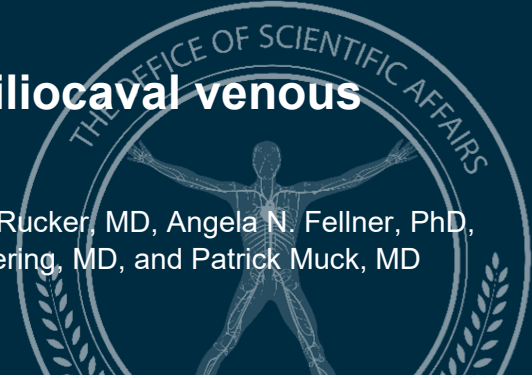


Novel therapy for recanalization of chronic ilio caval venous occlusion using radiofrequency

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INTRODUCTION

This single-center retrospective review investigated the feasibility and safety of using the PowerWire® RF Guidewire to recanalize chronic ilio caval venous occlusions (CICVOs) in cases where conventional endovascular recanalization had failed multiple times.

METHODS

Ten patients who had undergone multiple failed attempts at recanalization of a CICVO were enrolled in this study.

- The PowerWire® RF Guidewire was used to cross occlusions.
- Patients were subsequently stented after RF-assisted recanalization.

Technical success:

Successful usage of the RF wire to cross the occluded venous segment, with adjunctive procedures used to restore >70% of luminal patency.

Clinical Success:

The absence of symptoms and presence of functional arteriovenous shunts in patients who had surgical dialysis access at the time of follow-up.

RESULTS

Technical success was achieved in 6 of 10 patients (60%) with zero adverse events reported.

- 3 out of 4 patients (75%) with occlusions in stented vessels underwent successful recanalization with the PowerWire® RF Guidewire.
- Using a stiffer RF wire was not attempted in any of the unsuccessful cases.
- Adjunctive interventions (angioplasty and stenting) were conducted on all 6 successful cases and 1 failed case.
- Failure to recanalize did not appear to be influenced by the occlusion being present in a stented vessel versus a native vein.

DISCUSSION

PowerWire® RF guidewire can be used to recanalize occlusions in ilio caval veins, including when traditional endovascular techniques have failed.

- Along with the typical risks incurred by any endovascular procedure, using an RF wire carries the additional risk of perforation.

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