Acute Embolic Renal Ischemia – Successful Thrombo-aspiration with Off-label Devices

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Introduction:
Acute renal ischemia diagnosis requires a high index of suspicion.
Time sensitive and Irretrievable loss of renal function occurs, if not treated promptly.
We describe a case of renal artery embolism treated by endovascular means with off-label devices

Methods:
Patient clinical charts and imagiologic studies were retrospectively consulted.

Case Report (1):
42 year-old male
Prior Medical History:
-Pulmonary embolism
-Acute upper limb ischemia
-Myocardial infarction (embolism)
Medications: edoxaban and acetilsalycilic acid
Clinical Presentation:
-Acute right lumbar pain (6h)
-Nausea and vomiting
-Acute kidney injury

Figure 1: CTA – Acute occlusion (embolus) of right renal bifurcation, and diffuse kidney ischemia

Case Report (2):
-Percutaneous thromboaspiration
-7Fr sheath RRA
-Aspiration 20mL and 50mL syringe

Figure 2: Thrombus on RRA bifurcation (A) RRA patency at the end (B)

Case Report (3):
-Percutaneous Fogarty 4 thrombectomy
-2mg Alteplase
-Proglide closure

Figure 3: Post-operative CTA with RRA patency and significant perfusion improvement of the renal parenchyma

Conclusion: Renal ischemia is challenging. In those with salvageable parenchyma, expedited revascularization efforts should be pursued. Off-label use of common devices can provide favourable outcomes without the morbidity related to open surgery