

## **BILATERAL RENAL INFARCTION: RARE MANIFESTATION OF PATENT FORAMEN OVALE (PFO)**

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Cases of renal infarction are often missed and hence rarely reported. Renal infarction is commonly attributed to cardiac thromboembolism due to atrial fibrillation, valvular diseases or due to hypercoagulable state. We report a very rare case of renal infarcts secondary to patent foramen ovale (PFO) and suspected paradoxical embolism as the source.

A 44-year-old male with hypertension presented to our Hospital with acute left flank pain. Laboratory results were significant for leucocytosis of 11,900/cu.mm, microscopic hematuria on urinalysis and elevated LDH of >500IU/L. Further work up with contrast enhanced CT scan showed multiple wedge shaped hypo densities in the left kidney suggestive of renal infarcts and incidental finding of pulmonary arteriovenous malformation (AVM) between right interlobar artery and right inferior pulmonary vein.

Hypercoagulable work up was negative on multiple occasions. An MRA of the abdomen was unremarkable for atheroembolic phenomenon. A transoesophageal echocardiogram showed a PFO. Venous and arterial Doppler failed to show any lower or upper extremity thrombus. When heparin was stopped for colonoscopy, patient developed right-sided renal infarcts again. Eventually he was transferred to another facility for Transcatheter Cardio-PFO closure device with self-expanding double umbrella design. CT angiogram of the chest revealed no evidence of AVM. Post-procedure, anticoagulation was stopped and no more embolic events were observed on aspirin and clopidogrel.

Renal infarcts from paradoxical emboli secondary to PFO are extremely rare (only 2 cases were reported). The incidence of finding a proximal leg or pelvic venous thrombosis in paradoxical embolism is only 10-22%, which can explain the negative Doppler studies in our case. We conclude that PFO should be included in the differential diagnosis for the causes of renal infarcts and its closure would prevent unnecessary anticoagulation.