

Acute Renal Infarction: a Diagnostic Challenge

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Background: Acute renal infarction (ARI) is a rare condition with four identifiable groups: - thromboemboli originating from the heart or aorta; - renal artery injury; - hypercoagulability disorders; - idiopathic. Abdominal pain and increased level of LDH are a typical finding. Renal colic and acute pyelonephritis should be excluded. Many patients were managed conservatively.

Case history: A 37-year-old previously healthy male presented to the ED of our hospital for intense abdominal pain. Laboratory analysis showed an elevated WBC and LDH counts, abdominal CT displayed a hypodense area in the left superior polar renal parenchyma suspected for pyelonephritis. The patient was treated with levofloxacin and analgesics, blood cultures and urinalysis were negative, a contrast-enhanced abdominal CT reported a double renal arteries originating from the aorta and thrombosis of left superior polar branch causing ARI. He was started on enoxaparin, 100 mg twice daily, and examined for the possible source of emboli or a thrombophilic state. The results

of tests revealed only a MTHFR C677T homozygous mutation. He was discharged on the tenth day with good clinical status.

Discussion: In our case ARI might be favoured by the abnormal renal vascularization and hyperhomocysteinemia. Further studies should focus on its etiology and prognosis.



Figure 1 Contrast enhanced abdominal CT showed hypodense area in the left superior polar renal parenchyma, a double renal arteries originating from the aorta and thrombosis of left superior polar branch.