Embolic Segmental Renal Infarction in a Patient with Atrial Fibrillation

Ismail Taylan, Fuat Sar, Rumeyza Kazancioglu, Mustafa Tugrul, Muazzez Caymaz, Emel Tatli

A 38-year-old female presenting with left flank pain and palpitation for the previous 2 weeks was found to have a left tender abdomen and atrial fibrillation. Urine sediment showed 7-8 red blood cells/low power field, and serum lactate dehydrogenase was increased mildly (515 U/L; normal range, 220-450 U/L). Renal computed tomography showed a wedge-shaped perfusion defect in the left kidney, suggesting renal infarction (Panel A). Abdominal angiography and bilateral selective renal digital subtraction angiography were performed and demonstrated total occlusion of the left superior lateral and inferior pole segmental arteries, and triangle-shaped infarct areas (Panel B). Transesophageal echocardiogram revealed rheumatic mitral stenosis (valve area, 2.2 cm²). There was a thrombus measuring 0.9 x 0.6 cm in the left atrium. The patient was treated with diltiazem and anticoagulant drugs.

Segmental renal infarction most often occurs in patients with underlying cardiac disease [1]. Mitral stenosis associated with atrial fibrillation is a well known reason for renal infarction. Cerebral and peripheral embolism can occur at any time in the course of the disease [2]. Patients with acute renal infarction usually present with persistent lower back, abdominal or flank pain that suggests other, more common, diseases such as lumbago, abdominal disease, urolithiasis or even myocardial infarction. Early diagnosis is mandatory for effective acute and long-term therapy for the preservation of renal function [3,4].

REFERENCES