

A fatty cause of acute renal failure

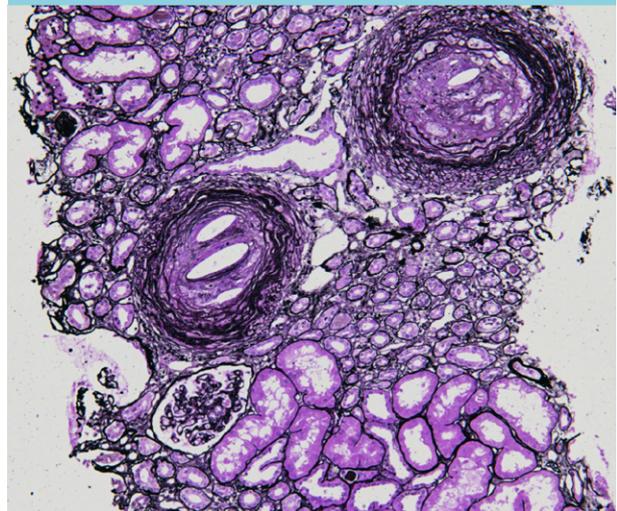
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CASE REPORT

A 72-year old man had a collapse, severe hypertension (RR 200/100 mmHg), and malaise. He had a history of nicotine abuse and had been started on acenocoumarol because of pulmonary embolism four months earlier. At the outpatient clinic, his blood pressure was 180/95 mmHg and no oedema or skin lesions were observed. Screening blood tests showed acute renal insufficiency, with an estimated glomerular filtration rate (eGFR) that had decreased from 74 to 41 ml/min/1.73 m² over the past five months. Urinary sediment microscopy showed 3-10 non-dysmorphic erythrocytes per view. The albumin/creatinine ratio was 44 mg/mmol. Abdominal ultrasonography did not show any postrenal obstruction or renal parenchymal abnormalities; the kidneys were normal in size. It did, however, show aneurysmatic dilatation of the abdominal aorta, maximum diameter 3.6 cm. Doppler ultrasonography did not show renal artery stenosis. Analyses of secondary causes of hypertension were negative. Because of progressive renal failure and microscopic haematuria, renal biopsy was performed. The result of the biopsy is shown in *figure 1*.

Figure 1. Light microscopy image of the renal biopsy (silver staining, original magnification 100x), showing an area of zonal interstitial fibrosis/tubular atrophy and cross sections through two small arteries. Arteries show intimal fibrosis and occluded lumina as a result of recent atheroembolism. Note the conspicuous almond-shaped cholesterol clefts



WHAT IS YOUR DIAGNOSIS?

See page 366 for the answer to this photo quiz.