Oliguric acute renal failure as a complication of treatment of an infrarenal aortic aneurysm by implantation of an aortic stent

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To the editor: Endovascular repair of abdominal aortic aneurysm (AAA) is a therapeutic alternative to open surgery in selected patients.[1,2] Occurrence of acute renal failure (ARF) following implantation of an aortic stent in a patient with AAA is reported here.

CASE REPORT

A 58-year old male with a history of NSAID intolerance, a former smoker of 60 cigarettes daily recently diagnosed locally advanced non-small cell lung carcinoma. The patient had started biweekly chemotherapy with cisplatin-gemcitabine, of which two cycles had been administered. Baseline kidney function was normal (serum creatinine levels, 0.8 mg/dL).

The patient experienced acute ischaemia in the right lower limb. An angio-CT revealed a 4.5-cm infrarenal aortic aneurysm extending to common iliac arteries and thrombosis of the right external and internal common iliac arteries. A right femoral thromboembolectomy was performed. One day later, aneurysm exclusion was performed using a left monoiliac aortic stent and a left-to-right femorofemoral bypass. After this procedure, the patient experienced oliguric ARF that required haemodialysis replacement therapy. Despite the finding of vascular patency in the arterial Doppler and control arteriography, kidney function was not recovered, and continued haemodialysis was required. A subsequent scan showed absence of renal uptake. Because of the underlying disease (lung cancer), vascular conservative treatment was decided, and the patient continued on haemodialysis.

DISCUSSION

AAA is a serious vascular condition characterised by a permanent focal dilation in the aorta.[3] More than 90% of AAAs are secondary to arteriosclerosis, and most of them are infrarenal in location.[4] This condition is more common in males, and its incidence substantially increases from 55 years of age.[5] Endovascular repair of AAAs is an alternative to elective open surgery, particularly in selected patients, with low mortality and acute complication rates.[6] In the case reported, and because of the history of lung neoplasm, endovascular repair was decided, and oliguric renal failure occurred as a complication of such procedure. Since the subsequent arterial Doppler and control arteriography showed patent renal and femoral flow, and in the CT scan the right kidney appeared normal and the left kidney showed hypodense areas suggesting infarction, the possibility that the ARF was related to the renal ischaemia-acute tubular necrosis caused by the procedure and was potentially reversible was considered. Failure of kidney function to recover over time may perhaps be related to late migration of the stent to renal arteries, which was subsequently confirmed by the absence of renal uptake in a scan.

In conclusion, migration of the aortic stent is a potential cause of ARF in patients with AAA undergoing this endovascular procedure.

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Acute renal failure after intake of mushrooms: the orellanus syndrome

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To the editor: Harvesting and intake of wild mushrooms causes a significant number of poisonings, particularly in autumn. A patient with a mixed syndrome of hepatic and renal failure following intake of mushrooms from the species *Amanita phalloides* and *Cortinarius orellanus* is reported. No description of any poisoning showing such an association has been found in the literature. A 74-year old male patients with an unremarkable history attended the emergency room for intractable vomiting and diarrhoea. The patient reported to have taken mushrooms 12-15 hours before. Physical examination showed an acceptable general condition and haemodynamic stability. Laboratory test results included: urea 89 mg/dL, creatinine 3.4 mg/dL, Na 137 mmol/L, K 4 mmol/L, GOT 1406 IU/L, GPT 1170 IU/L, LDH 1319 IU/L. Coagulation: PAI 71%, APTT 43.4 sec, INR 1.24. Complete blood count: Hb 18 mg/dL, haematocrit 53.3%, WBCs 11,200/mm^3 (N 78%). Urine: Na 30 mmol/L, K 66 mmol/L, urea 16.3 g/L, creatinine 155.4 mg/dL. Acute renal failure due to volume depletion and hepatic failure secondary to mushroom intake were diagnosed, and the patients was admitted to the intensive care unit. Treatment was started with penicillin G so-