CLINICAL SNAPSHOT

Aortocaval Fistula After Fracture of an Aortobiiliac Stent for Abdominal Aortic Aneurysm

An 80-year-old man underwent endovascular treatment of a 5.5-cm infrarenal abdominal aortic aneurysm (Figure a, arrow 1) by means of an aortobiiliac stent but did not attend for the planned regular postinterventional aftercare. Nine years after stent insertion he presented to our emergency department with extremely severe abdominal pain. In the arterial phase, computed tomography showed an extensive endoleak with a fracture of the stent at its cranial end (Figure b, arrow 2), with a hemodynamically significant fistula to the inferior vena cava (Figure a and b, arrow 3). Stent fracture with resulting reperfusion of the aneurysmal sac is a rare late complication after endovascular management of an abdominal aortic aneurysm. It may lead to rupture of the aneurysm or, very rarely, to an aortocaval fistula. The treatment of choice is the endovascular implantation of a covered stent in the defective stent graft to seal the endoleak. Endovascular closure of the aortocaval fistula was successful, but the patient suffered postoperative renal failure and hemodynamic instability, leading to his death.

Computed tomography of the abdominal aortic aneurysm

- a) Paracoronar reconstruction from ventral;
b) Paracoronar volume rendering reconstruction from dorsal;
arrow 1: infrarenal abdominal aortic aneurysm,
arrow 2: stent fracture, arrow 3: aortocaval fistula

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