Fibromuscular dysplasia of renal arteries

Fig. 1

A 65-year-old woman presented with arterial hypertension (210/100 mm Hg) to the emergency department. Physical examination revealed a systolic-diastolic bruit in abdominal auscultation. The electrocardiogram and echocardiography showed left ventricular hypertrophy and an interatrial septal aneurysm. Antihypertensive treatment with urapidil led to an immediate drop in the blood pressure. Screening for secondary causes of hypertension revealed serial collateralized stenoses and multiple aneurysms of both renal arteries, which formed a “string of beads” in the reconstructed computed tomography image (Fig. 1) and are characteristic of fibromuscular dysplasia. The size of both kidneys was normal. To preserve kidney function, renal revascularisation was performed using an autologous saphenous-vein aortorenal graft. Blood pressure dropped immediately after revascularisation and remained in a normotensive range in the follow-up controls.

Fibromuscular dysplasia is a noninflammatory, nonatherosclerotic disorder, which mainly affects renal arteries in young women [1, 2]. However, renal stenoses due to fibromuscular dysplasia may cause secondary arterial hypertension also in older people.

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References

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