An Unusual Site of Renal Artery Stenosis

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A 40-year-old female presented with history of weakness and dizziness of two months duration. There was no significant past or family history. On examination, blood pressure was 220/130 mm Hg in both the upper limbs. All peripheral pulses were well felt and there were no bruits.

Fundus showed grade 4 hypertensive retinopathy changes (Figures 1A and 1B). Rest of the examination was normal. A complete haemogram, ESR, renal function, blood sugar, lipid profile, urine analysis, electrocardiogram, 2D-transthoracic echocardiography and chest X-ray were normal.

Screening for secondary hypertension work up was suggestive of right renal artery stenosis on doppler study. As the blood pressure was uncontrolled with four anti-hypertensive medications, patient was referred for renal angioplasty and stenting.

A CT renal angiogram revealed stenosis of right renal artery at the hilum (Figure 2). Renal artery angiography with stenting was done successfully (Figures 3A and 3B).

At three months follow up after the intervention, she is asymptomatic. Blood pressure was 130/80 mmHg, without any anti-hypertensive medications. Hypertensive retinopathy changes have regressed from grade 4 to grade 2 (Figures 4A and 4B).

Renovascular hypertension is the most common cause of secondary hypertension.¹ The most common site of stenosis is ostial as in atherosclerosis and aortoarteritis, and middle one-third in fibromuscular dysplasia.² In this report, the site of stenosis is distal, which is a rare entity.

References