Accessory Renal Artery Stenosis

A Cause for Drug Refractory Hypertension



78 y.o AAF, with long standing HTN (for more than 30yrs), obesity (BMI higher than 35), hypercholesterolemia, peripheral vascular disease, aortic sclerosis, chronic renal insufficiency (GFR 35-40 cc/min/m2), and a history of chewing tobacco presented to the Internal Medicine clinic with uncontrolled HTN and deterioration of renal function over a 12 months period.

Despite aggressive medical therapy and modification of lifestyle factors there was no improvement in her kidney function and blood pressure control.

Laboratory results

• decreased GFR: 35 to 25 ml/min/1.73 m²

• increased Cr: 1.6 to 2.4 mg/dL

• kidney U/S: normal

Medication

Lisinopril 40 mg daily

Norvasc 10 mg daily

Furosemide 80 mg bid

Clonidine 0.3 mg po tid

Atorvastatin 80 mg daily

Ezetimibe 10 mg daily

Physical examination

Well appearing and in no distress. Fundoscopy showed increased arteriolar brightness with no papilledema. No carotid bruits were appreciated. Heart auscultation revealed S4 with soft 2/6 systolic murmur (previously documented). Chest showed normal respiratory sounds with no crackles. Abdominal exam was benign. No bruits appreciated. Peripheral pulses were decreased in both lower extremities.

- What is the most possible diagnosis?
- What tests would you order?
- What treatment would you start for this patient?
- What do you think is the final diagnosis?
- What did you learn from this case?