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An incidental finding while investigating secondary hypertension: severe abdominal aortic pseudocoarctation

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A 46-year-old female patient presented with uncontrolled hypertension to investigate a possible secondary underlying cause. Her hypertension was incidentally diagnosed when she was being evaluated preoperatively for uterine fibroma. She had no family history of hypertension. Her initial blood pressure was 190/110 mmHg from both arms. No abdominal bruit was audible over the trajectory of renal arteries or abdominal aorta. Bilateral upper and lower extremity arterial pulses were symmetrically palpated. We performed renal Doppler ultrasound along with endocrinologic work-up. Doppler ultrasound of the kidney revealed normal renal arteries and a kinking in the infrarenal part of the abdominal aorta. Thus, we performed magnetic resonance angiography of the abdominal aorta and renal arteries to further clarify the aforementioned findings on ultrasound. It revealed leftward severe abdominal aortic kinking below the renal arteries' origins (Figure 1). No mass lesion was seen to depress the aorta. All other work-ups proved to be unremarkable in terms of revealing an underlying cause for the patient's hypertension. We managed to control the hypertension with olmesartan 40 mg qid, bisoprolol 10 mg qid and amlodipin 10 mg qid treatment.

Abdominal aortic pseudocoarctation is a very rare developmental abnormality. To the best of our knowledge, only a few cases have been published in the literature to date [1,2]. The throasic form of the condition that is much more prevalent usually involves the aortic arch and may be associated with pseudoaneurism formations [3,4]. This abnormality is benign and does not cause a luminal narrowing or abnormal collaterals and most of the time remains asymptomatic.

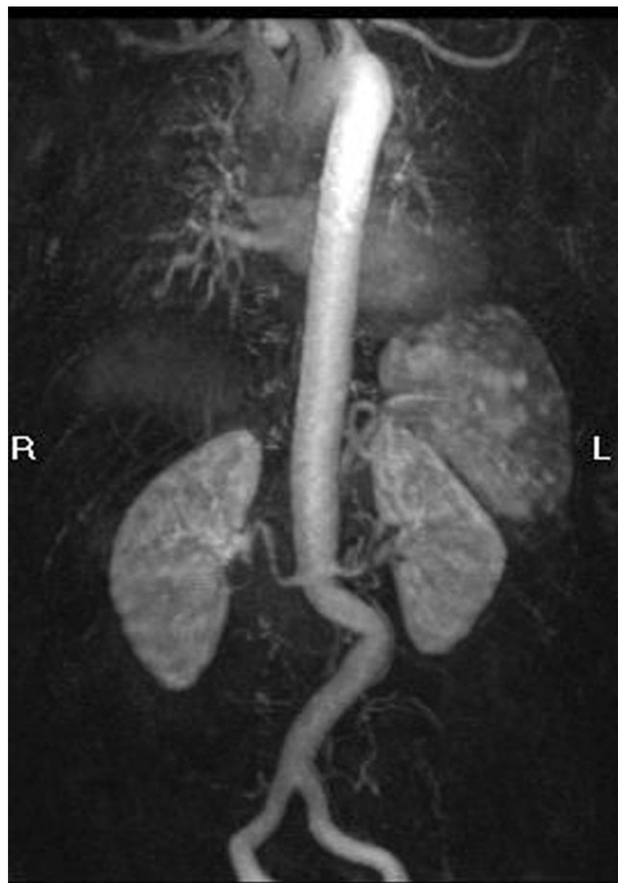

Fig. 1. Magnetic resonance imaging of abdominal aorta shows severe leftward kinking of abdominal aorta below the renal artery origins.

Conflict of interest statement. None declared.

References

1. Etemad-Rezai R, Rankin RN. Abdominal aortic pseudocoarctation. *CMAJ* 2009; 180: 317–318
2. Schellhammer F, von den Driesch P, Gaitzsch A. Pseudocoarctation of the abdominal aorta. *Vasa* 1997; 26: 308–310
3. Bluemke DA. Pseudocoarctation of the aorta. *Cardiol J* 2007; 14: 205–206
4. Choi BW, Choe KO, Kim YJ. Magnetic resonance angiography of pseudocoarctation. *Heart* 2004; 90: 1213

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