Description

A 22-year-old man with no previous medical history was admitted in our hospital for management of severe hypertension.

It’s a patient followed disorderly for high blood pressure for six months under ARB (Angiotensin II Receptor Blockers) and Calcium Antagonist with a recent elevation of his blood pressure in spite of association of a B-Adrenergic Blocker and a thiazide diuretic.

On physical examination his blood pressure measured 220/120 mmHg in both arms, with a regular pulse of 59 beats per minute. Auscultation of the abdomen revealed a murmur in the upper abdomen. Peripheral pulsations were all palpable and there was no history of abdominal pain or claudication. Serum creatinine was 67 umol/l and Modification of Diet in Renal Disease-Glomerular Filtration Rate (MDRD-GFR) was >90 ml/min/1.73 m².

Doppler ultrasound examination demonstrated tortuosity and narrowing of the abdominal aorta with signs of the renal artery stenosis; following which he underwent Computed Tomography (CT) angiography.

Tomography (CT) angiography revealed a long segment stenosis of abdominal aorta with a thrombus in the right kidney multiple collateral vessels (Figures 1 to 4).

After discussions, a chirurgical treatment was decided; an aorto-aortic bypass from the descending thoracic aorta to the aortic bifurcation using a Dacron graft and aspiration of the thrombus in the renal artery.

The post-operative period was uneventful, his blood pressure dropped to 145/85 mmhg.

Figure 1: CT Scan showing epidural hematoma with associated diffuse subarachnoid hemorrhage.

Figure 2: Angiography showing a long segment stenosis of abdominal aorta with multiple collateral vessels supplying the right kidney.

Figure 3 A&B: See the critical obstacle in the abdominal aorta including the right renal artery.

Figure 4: Showing the thrombus in the right renal artery (arrow).

References