

Hypertension at a young age: beware of the unexpected

D.J.L. van Twist^{1,*}, A.W.J.H. Dielis¹, A.A. Kroon¹

¹Department of Internal Medicine, Maastricht University Medical Centre (MUMC+), Maastricht, the Netherlands,*corresponding author: tel: +31 (0)43-3877005; fax: +31 (0)43-3875006, email: daan.van.twist@mumc.nl

CASE REPORT

A 25-year-old man with a clear medical record was referred because of accidentally discovered hypertension. He had a normal lifestyle and body mass index (20.4 kg/m²) and was not using any medication or other substances. A thorough physical examination was normal, except for high blood pressure (220/95 mmHg). Although 24-hour ambulatory blood pressure measurements showed a white coat effect, his blood pressure was nevertheless elevated: 151/101 mmHg. Routine laboratory tests, including serum potassium level, were normal and the estimated glomerular filtration rate was 85 ml/min/1.73m². As echocardiography revealed left ventricular hypertrophy, treatment with valsartan 80 mg daily was

initiated, resulting in a decrease in the blood pressure to 130/75 mmHg. Given his young age and the presence of left ventricular hypertrophy, we suspected renovascular hypertension (e.g. due to fibromuscular dysplasia) and performed an invasive renal digital subtraction angiography (*figure 1*).

WHAT IS YOUR DIAGNOSIS?

See page 389 for the answer to this photo quiz.

Figure 1. Selective digital subtraction angiography of the right and left kidney

