

## **PS2.112**

### **Curable hypertension: a case report**

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Early detection of secondary hypertension is important because there is evidence that produces greater morbidity and mortality than primary hypertension and a third of cases are curable.

A 38-year-old woman acute to the primary care center reporting musculoskeletal pain. She had no past health. The physical examination revealed arterial tension 190/100mmHg with no other findings. When hypertension was confirmed, treatment with Amlodipine was started. Blood test: potassium 2.4 mmol/L and was otherwise normal. Additional test demonstrated aldosterone 399 pg/mL, plasma renin activity<0.2ng/mL/hr and microalbuminuria 35.5 mg/L. Abdominal CT: 15mm right adrenal nodule compatible with adrenal adenoma. Amlodipine treatment was changed to spironolactone. The patient underwent surgery being practiced right laparoscopic adrenalectomy. The anatomical and pathological examination confirmed an adrenal cortical adenoma. After the intervention the patient normalized their blood pressure and electrolytes without drug treatment, thus maintained until today.

Primary hyperaldosteronism prevalence reaches almost 5%-20% of the population of hipertensive pacientes and it's underdiagnosed. The classic patient presents hypertension and hypokalaemia, but normokalaemia may be more frequent. The most common causes of primary hyperaldosteronism are aldosterone-producing adenomas and bilateral adrenal hyperplasia.

Hyperaldosteronism may be suspected if hypertension is associated with the followings situations: hypokalaemia, severe or resistant hypertension, hypertension with an adrenal incidentaloma, young onset of hypertension. Other situations: hypertension and diuretic-induced hypokalaemia, hypertension and family history of early-onset hypertension or cerebrovascular accident, hypertensive patients with a first degree relatives of those with primary hyperaldosteronism.

The screening should consist of documenting low level of plasma renin activity or plasma renin concentration and high level of plasma aldosterone concentration. To confirm the diagnosis, the demonstration of inappropriate aldosterone secretion should be requested with aldosterone suppression testing, although in our case these tests weren't ordered.

Adrenal CT should be the initial study to determine subtype (adenoma versus hyperplasia) and exclude adrenal carcinoma.