

HYPERTENSION IN YOUNG ADULTS - THREE UNUSUAL CASES

Background: Hypertension occurring in children, adolescents and young adults is uncommon and almost always sparks off an intense search for an underlying aetiology. Though essential hypertension is still the commonest form here, secondary hypertension occurs with greater frequency than in adults and is most often due to renal disease, followed by cardiovascular and then endocrine disorders.

Case Reports:

34-year-old caucasian female

Laboratory data:

Plasma renin activity (PRA): 19.40 ng/mL (N 1.9 – 6.0),
Plasma aldosterone: 1052 pg/mL (N 35 – 275),
Urinary aldosterone: 19.43 µg/dia (N 2.1 – 18.0),
Kaliemia: 3.4 mmol/L (N 3.5 – 5.1) ;

Renal CT scan: significant renal asymmetry (LK > RK);

Renal CT Angiography : kidneys with multiple arteries without significant stenosis,. The lower pole accessory artery is smaller in calibre;

Renal Arteriography: right renal artery hypoplasia. Right renal artery is one third the caliber of left, corresponding to the smaller right kidney.



43-year-old caucasian female

Laboratory data:

Plasma aldosterone: 456 pg/mL (N 35 – 275),
PRA: 1.55 ng/mL (N 1.9 – 6.0);

Renal Ultrasound: right pyelocalicial duplicity (congenital disorder) with reduced parenchymal of the lower pyelon.

36-year-old caucasian female

Personal history:

- Nasal cavity cancer diagnosed 18 years ago;
- Hypopituitarism due to radiation treatments ;
- Hypertension secondary to corticosteroids therapy.

Conclusions: Clinicians must be alert to the existence of secondary causes of hypertension, especially in young adults who should be investigated. It is essential to take in consideration personal and family history and physical examination in order to request the appropriate tests and treat accordingly the underlying cause of hypertension to prevent its consequences.

References:

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