New Endocrine Society Recommendations Regarding Endocrine Hypertension

Prevalence of Endocrine Hypertension and Primary Aldosteronism

It is estimated that over 100 million Americans are affected by primary or secondary hypertension.1 Between 15-20% of hypertension cases are attributed to secondary hypertension, including approximately 15 million patients with endocrine hypertension.1 The majority of endocrine hypertension cases, approximately 90%, are caused by primary aldosteronism.1,2

Who Should be Screened for Endocrine Hypertension?

Data has indicated that endocrine hypertension may occur more often than previously thought. In an effort to improve diagnosis, the Endocrine Society has established recommendations for diagnosing endocrine hypertension.2 The recent guidelines recommend performing an aldosterone-renin ratio (ARR) to screen for primary aldosteronism in higher risk groups of hypertensive patients who:2

- Have sustained blood pressure (BP) above 150/100 mm Hg
- Have hypertension and hypokalemia (low potassium) with or without diuretic drugs
- Are resistant to 3 drugs or are controlled with 4 or more drugs
- Are diagnosed with hypertension before age 30
- Have a family history of hypertension or cerebrovascular accident before age 40
- Have hypertension and a known adrenal mass
- Have hypertension and a first degree relative with primary aldosteronism

Diagnostic Algorithm for Primary Aldosteronism.2

Diagnostic Algorithm*

Patients at increased risk for primary aldosteronism (PA)

Aldosterone Renin Ratio

If <30 (ng/dL)/(ng/mL/hr)  If >30 (ng/dL)/(ng/mL/hr)

PA Unlikely

Confirmatory Testing**
Sodium chloride infusion, salt loading suppression test, fludrocortisone suppression or captopril challenge

PA Unlikely

Adrenal imaging and/or adrenal venous sampling if indicated; and appropriate follow-up

PA Unlikely

Beyond Primary Aldosteronism Screening

LabCorp and Endocrine Sciences, a member of the LabCorp Specialty Testing Group, offer a comprehensive test menu to assist with your diagnosis and management of endocrine hypertension. Additional causes of endocrine hypertension to consider if the patient fits the clinical features include:3

- Pheochromocytoma
- 11- or 17- hydroxylase deficiency
- Renovascular hypertension
- Cushing syndrome
- Hypercalcemia
- Primary hyperparathyroidism
- Acromegaly
- Thyroid disorders
- DOC-producing tumors
- Primary cortisol resistance

**No need for confirmatory testing if patient presents with low potassium, undetectable renin, and plasma aldosterone concentration (PAC) above 20 ng/dL.3
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References