



Book Supplement

Differential Diagnosis Hyperaldosteronism in Adults (most common)

Disease	Notes
Primary aldosterone excess of adrenal origin: adenoma; adrenal hyperplasia; adrenal carcinoma; ectopic adrenal tumors	Hypertension, usually with unprovoked hypokalemia. All have elevated aldosterone levels, suppressed renin, and nonsuppressible aldosterone with salt loading. They are differentiated by CT or MRI and adrenal venous sampling.
Cortisol excess of adrenal origin	Hypertension and potassium wastage, but with low aldosterone levels. Cushingoid features may not be prominent.
11- β -hydroxysteroid dehydrogenase deficiency	Renal origin. Congenital: apparent mineralocorticoid excess; absence or acquired inhibition of 11- β -hydroxysteroid dehydrogenase enzyme in kidney responsible for conversion of cortisol to cortisone. Excess cortisol acts as mineralocorticoid. Acquired: licorice, carbenoxolone.
Liddle's syndrome	Activation of renal epithelium sodium channels (due to genetic mutations), which causes volume expansion hypertension. Turns off renin and aldosterone secretion. The increased sodium reabsorption leads to increased potassium wastage and hypokalemic alkalosis.