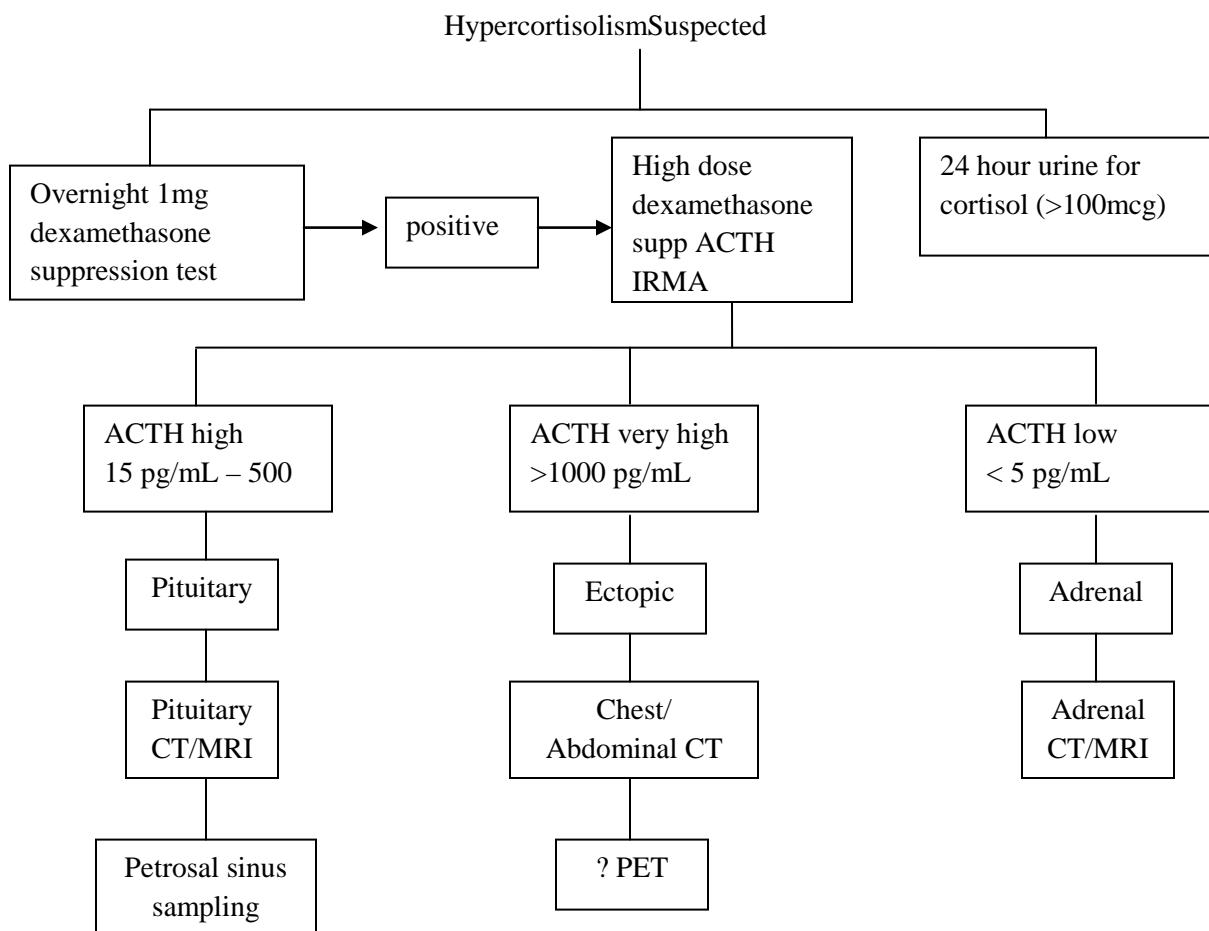


Hypercortisolism

- 1) Exogenous steroid (e.g. txp)
- 2) Cushing Syndrome
 - a) ACTH dependent 80-90%
 - i) Pituitary adenoma
 - ii) Ectopic (NSC lung cancer, bronchial carcinoid) 10-20% ¹
 - b) ACTH Independent 10-25%
 - i) Solitary adrenal adenoma 80-90%
 - ii) Diffuse nodular hyperplasia

Clinical - hirsutism, headache, moon facies, depression, buffalo hump



¹ All have bilateral actual hyperplasia

Hyperaldosteronism

- 1) Primary - Adrenal Neoplasia – decreased rennin
 - a) 2 times more in women
 - b) 30-50 y/o
 - c) 15% cause of hypertension
 - d) 60-70% adrenal adenoma
 - e) Idiopathic b/l hyperplasia
- 2) Secondary
 - a) Decreased renal perfusion
 - i) RAS
 - ii) cirrhosis
 - iii) CHF
 - iv) Pregnancy

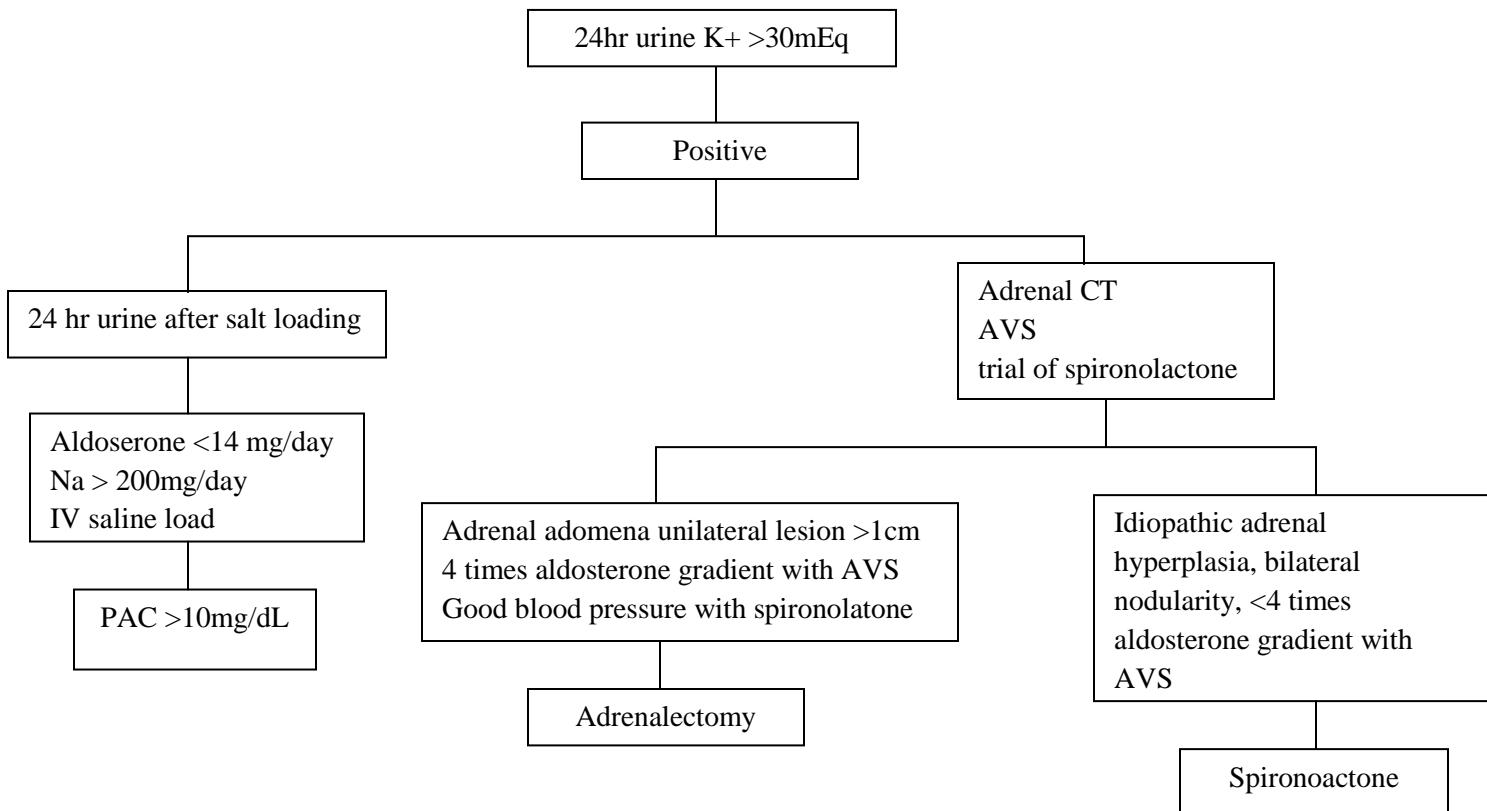
Clinical Hallmarks

- 1) Diastolic hypertension without adema
- 2) Supplement of plasma renin in face of volume depletion
- 3) Increased aldosterone despite volume resuscitation

Hyperaldosteronism Suspected
(plasma renin concentration)

PRA <1mg/mL/hr

PRA/PAC (plasma aldo concentration) > 30 (&PAC > 20mg/dL)



Pheochromocytoma 0.1%

HA, sweating, tachycardia

b/l - 10% extra adrenal 10%, familial 10%, multicentric 10%, malignant 10%, children 10%

Familial

- 1) Von Hippel-Lindau
 - a) Bilateral
 - b) Renal angiomas
 - c) Cerebellar hemangioblastoma
- 2) MEN 2A
 - a) Pheochromocytoma (bilateral)
 - b) Medullary carcinoma thyroid
 - c) Parathyroid hyperplasia
- 3) MEN 2B
 - a) Pheochromocytoma (bilateral)
 - b) MTC
 - c) Mucosal neuromas
 - d) Marfanoid

Symptoms

- 1) Episodic headache
- 2) Sweating
- 3) Tachycardia

Diagnosis

- 1) Elevation of catecholamines
 - a) Serum fractionated metanephrenes
 - b) Plasma catecholamines
 - c) Urine catecholamines & NMA
- 2) Normal blood pressure or mild HTN with elevated catecholamines
 - a) 0.3mg clonidine
 - i) Catecholamine <500pg/mL in nl pt, but 0 reduction in pheochromocytoma
- 3) CT, MRI, MIBG (similar to norepi)

Treatment

- 1) Phenoxybenzamine (α blockade) 2-3 hours prior (post hypotension, tachy, nasal congestion)
- 2) B blockade after α blockade if tachy

Incidental Adrenal Mass

Plasma fracture metanephrides
1mg dexamethasone supplement
K+, PRA/PAC (if HTN)
Adrenal CT
Adrenal MRI

