



SCGH Adrenal Incidentaloma Referral Guidelines

Reference # *****

Scope

Site	Service/Department/Unit	Disciplines
SCGH	Department of Endocrine Surgery	Surgical

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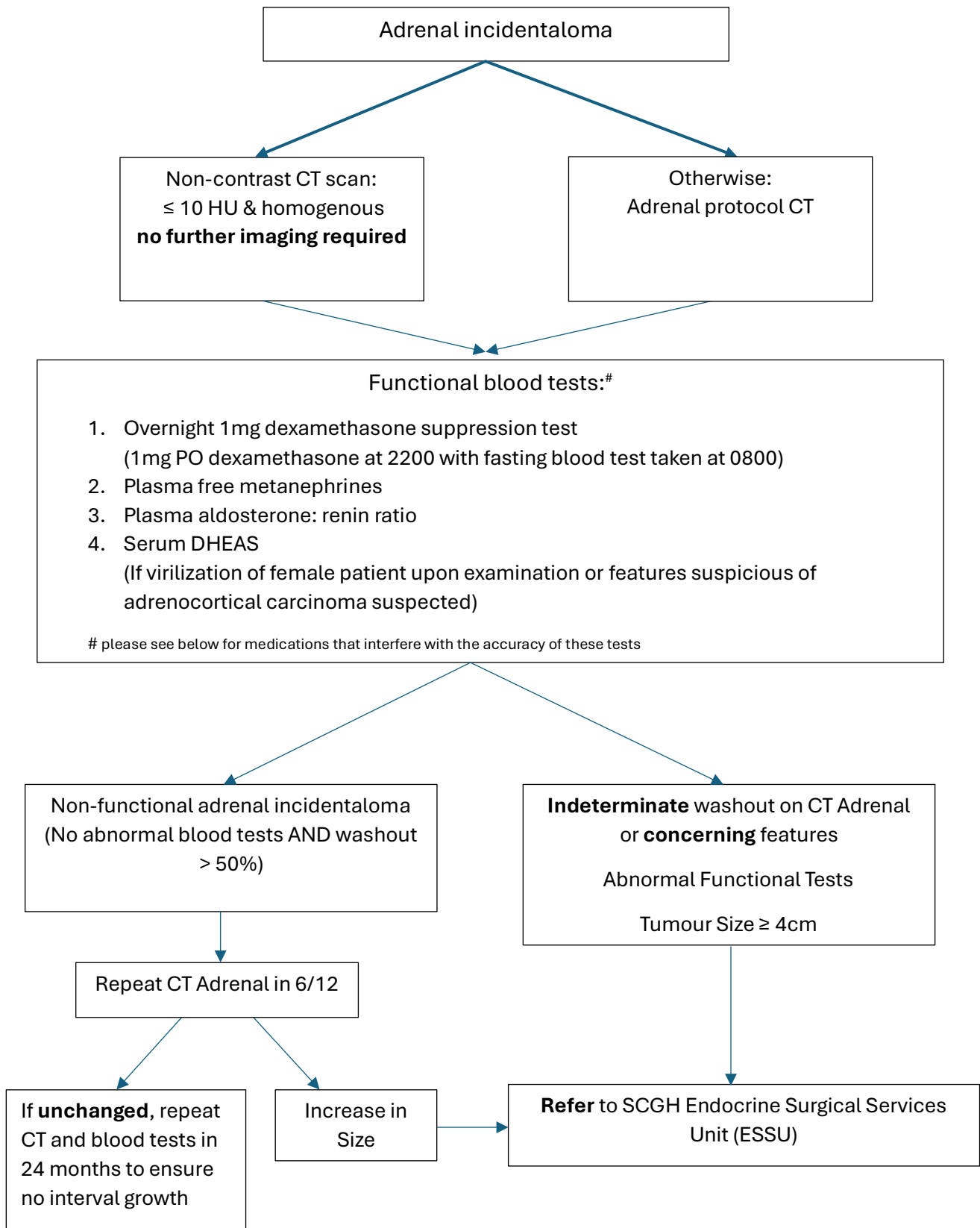
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Flow-Chart





Background

Adrenal incidentalomas (AIs) are common and occur in up to 5% of CT scans. The prevalence of AIs increases with age as suggested by prevalence rates of 4% and 10% in patients aged 40 and 70 years old respectively.¹ Although the majority of adrenal incidentalomas are nonfunctional and benign, it is important to exclude malignancy and over-production of hormones. Patients with hormone over-production are often asymptomatic, however, they are at increased cardiometabolic risk and all-cause mortality.^{2,3}

The differentials (and approximate prevalence) for an AI include⁴:

- Non-functioning, benign (75%)
- Functioning (25%)
 - Primary hypercortisolism (11%)
 - Pheochromocytoma (9%)
 - Primary hyperaldosteronism (5%)
- Adrenocortical carcinoma or metastasis (2%)

Medications may influence functional blood test results; therefore, we recommend considering optimizing for confounding factors prior to completing blood tests. The list of confounding items to consider controlling for each blood test are listed below.

Confounding factors of overnight 1 mg dexamethasone suppression test^{5,6,7}

Factor	Recommendation
Endogenous corticosteroids during times of acute stress in response to biopsychosocial factors	Delay test until discharge from hospital admission if acutely unwell and manage patient's stressors
Exogenous corticosteroids <ul style="list-style-type: none"> - Inhaled, topical, parenteral, intra-articular 	Wean if able for 2 weeks pre-test
CYP3A4 inducers/inhibitors <ul style="list-style-type: none"> - Itraconazole, fluoxetine, ritanovir, carbamazepine, corticosteroids, phenytoin, rifampicin 	Add on Dexamethasone level to blood test

Confounding Medications of plasma free metanephrines^{8,9}

Medication	Recommendation
Sympathomimetics <ul style="list-style-type: none"> - Caffeine, Nicotine 	Stop 24 hours pre-test
Paracetamol	Stop 5 days pre-test
Selective serotonin-reuptake inhibitors (SSRIs) <ul style="list-style-type: none"> - citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine, sertraline 	Stop 2 weeks pre-test
Tricyclic antidepressants (TCAs) <ul style="list-style-type: none"> - amitriptyline, clomipramine, dosulepin, doxepin, imipramine, nortriptyline 	Stop 2 weeks pre-test



Confounding factors of plasma aldosterone: renin ratio¹⁰

Medication	Recommendation
Angiotensin-converting enzyme inhibitors - Captopril, enalapril, fosinopril, lisinopril, perindopril, quinapril, ramipril,trandolapril	Switch 6 weeks pre-test to one or two of the following Verapamil (sustained release) 180 to 240mg daily - Contraindications: bradycardia, atrioventricular block and heart failure Prazosin: 0.5mg twice daily to 5mg TDS - Contraindications: patients with cataracts pending surgery
Angiotensin receptor blockers - Candesartan, eprosartan, irbesartan, losartan, olmesartan, telmisartan, valsartan	
Dihydropyridine calcium channel blockers - Amlodipine, clevidipine, felodipine, lercanidipine, nifedipine, nimodipine	
Loop diuretics - Bumetanide, furosemide	
Mineralocorticoid receptor antagonists - Eplerenone, finerenone, spironolactone	
Thiazide diuretics - Chlortalidone, hydrochlorothiazide, indapamide	
Selective & non-selective beta blockers - Atenolol, bisoprolol, carvedilol, labetalol, metoprolol, nebivolol, propranolol	

Risk Statement

Non-compliance with this guideline will:

Breach legislative requirements	<input type="checkbox"/>	Impact on Patient Quality of Care	<input checked="" type="checkbox"/>
Breach National/State/Hospital Policy	<input type="checkbox"/>	Impact on Patient Safety	<input type="checkbox"/>
Breach professional standards	<input type="checkbox"/>	Misconduct	<input type="checkbox"/>
Breach SCGOPHCG Mission & Values	<input type="checkbox"/>	Staff Safety	<input type="checkbox"/>
Other	<input type="checkbox"/>		



References

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