

Hyperaldosteronism

Is	Multiple or one cause that results in excessive aldosterone	
Etiology	Primary	<p>Conn syndrome</p> <ul style="list-style-type: none"> -AG pathy -Ai causing: hypersecretion of aldosterone & inh of renin-angiotensin system -AG biLateral hyperplasia -tumor might be found (mostly adenoma if found) -it could be familial (but rare)
	Secondary	<p>Pathies</p> <ul style="list-style-type: none"> -nephrosclerosis: results in renal hypofun (its due to renal artery stenosis) -hypovolemia: ass. With edemia (its due to HF, nephrotic syndrome, liver cirrhosis) -preg: (estrogen causes renin hyperfun) <p>signs</p> <ul style="list-style-type: none"> -hypersecretion of aldosterone -hyperfun of renin-angiotensin system
Symptoms	<ul style="list-style-type: none"> -secondary hypertension (left ventricle hypertrophy, MI & strokes) -hypernatremia (cuz aldosterone stimulates Na retention) -hypokalemia (cuz aldosterone stimulates K & H excretion) -alkalosis (due to hypokalemia) 	

AG hypofun

AKA	Adrenal insuff.		
Etiology	Primary (AG disease)	Acute	-AKA: adrenal crisis - <u>waterhouse-friderichsen syndrome</u> can be cong. - Sudden CorticoS. Withdrawal after prolonged treatment - Stresses in pt with underlying chronic AG hypofun
		chronic	- <u>Addison disease</u> -Fungal inf -Hemochromatosis -Sarcoidosis -Systemic amyloidosis -Ai -Tb -Tumor metastases
	Secondary (insuff ACTH)	-caused by PG disease	
waterhouse-friderichsen	-AG intra-hemorrhage resulting in bilateral AG failure -caused by septicemia (B: meningococcus neisseria meningitis) -common in Al-Hajj season (targets kids) -significantly high fever & skin rash (hemorrhages)		
adrenal crisis symptoms	-fatigue -dehydration -drop in BP (vascular collapse) -renal shut down (hypoNatremia & hyperkalemia)		
Addison disease			
Aka	Hyperaldosteronism		
Etiology	Military TB reaching AG -systemic spread of TB Septicemia -waterhouse-friderichsen Ai -targets Z.glomerulosa -T-cells is the main destructor -mostly pt would have other underlying Ai diseases		
Symptoms	-skin pigmentation (around: cheeks, forehead, creases & scars - we think that its caused by indirect act of ACTH on melanocytes) -electrolytes imbalance (hypoNatremia & hyperkalemia) -lethargy (fatigue) -hypotension		

Pleochromocytoma PCM

Is	Tumor of chromaffin cells of AGM		
Etiology	The rule of 10%s -10% of non-familial PCM are bilateral (70% if its familial) -10% of PCM is familial related (MEN2-A/B gene) -10% of PCM arise in extra-AG sites (bladder) -10% of PCM are malignant -10% of PCM target children		
Symptoms	-CAT hypersecretion (cuz chromaffin cells secrete them normally) -hypertension (surgically correctable - like aldosterone-secreting tumor)		
Diagnosis	-we look for CAT and their products in serum & urine (metanE & vanillyimandelic acid)		
Treatment	Tumor excision		
MEN2-A mutation	-thyroid medullary carcinoma -parathyroid hyperplasia	-C-cells hyperplasia	-PCM
MEN2-B mutation	-thyroid medullary carcinoma -mucosal neuroma	-C-cells hyperplasia	-PCM -marfonoid (skeleton mutations)

Other					
AGC carcinoma	<ul style="list-style-type: none"> -its features are non-like other of any carcinoma, its really hard to diagnose, so we rely on the weight of the AG, if it increased dramatically, then its most likely a carcinoma -hyperplasia & invasion are the main to risks 				
Cong. AG hyperplasia	<ul style="list-style-type: none"> -ass with: inc androgens & dec cortisol/aldosterone -caused by enz def (21/11-hydroxylase), the enz usually breaks estrogens & progesterones, so when its def they'll be highly elevated -causes kids ambiguous genitalia -if the enz is only partially mutated, female would have pre-puberty, hirsutism & voice hoarsness -neonatal screening for the enz is essential 				
Hypertension rare causes	<ul style="list-style-type: none"> -fibromascular hyperplastic renal artery (stenosis - detectable by angiography) -polycystic kidney (autosomal recessive - abdominal mass) -Conn syndrome (check for electrolytes balance) -pheochromocytoma (check for CAT in serum & urine) 				
	<table border="1"> <tr> <td>Signs</td> <td></td> </tr> <tr> <td>symptoms</td> <td> <ul style="list-style-type: none"> -sking café au lait spots -hemorrhages - </td> </tr> </table>	Signs		symptoms	<ul style="list-style-type: none"> -sking café au lait spots -hemorrhages -
Signs					
symptoms	<ul style="list-style-type: none"> -sking café au lait spots -hemorrhages - 				
VRNM1	<ul style="list-style-type: none"> -Von recklinghausen neurofibromastosis type1 -café au lat skin spots -schwannoma -meningioma -glioma -PCM -hemorrhages -well-defined tumor (polygonal or spindle chromaffin or chief cells) -sustentacular small cell -zellballen nests 				