

APPROACH TO CUSHING'S SYNDROME

First what are the causes of Cushing's?

Exogenous (known from Hx so stop or decrease drug)

Now we're left with 3 causes:

Pituitary adenoma (Cushing's disease), Ectopic secreting of ACTH, adrenal neoplasia

First step : low-dose Dexamethasone suppression test over night

> If ACTH suppressed then patient doesn't have Cushing's think of other Dx

> If ACTH is not suppressed we think Cushing's and we go to next step

Before going to next step if you'd like to confirm or if you were asked what's the Gold standard or the most sensitive test at this stage?

Cortisol-free 24-hour urine test

second step : we would like to localize the problem (pituitary or adrenal or ectopic)

do High-dose Dexamethasone suppression test

> If ACTH is suppressed the Dx is pituitary adenoma >> do MRI

Remember pituitary adenoma is considered a benign condition if it would be compared to Ectopic so it'll respond to the suppression, unlike Ectopic.

> If ACTH is not suppressed its either Ectopic or adrenal neoplasia

ok which of these has high ACTH ?

of course it's the Ectopic

so the third step to differentiate between Ectopic and adrenal is by measuring ACTH

If ACTH is high >>> Ectopic

If ACTH is low >>>> adrenal neoplasia

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