Adrenal insufficiency & hypopituitarism

MCQs

- A patient who has prolactinoma suspected to have :

(men 1 syndrome) Pheochromocytoma

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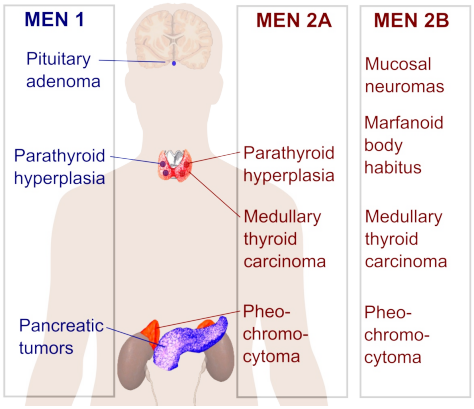


- A 62-year-old woman is evaluated for an incidentally discovered left adrenal mass. Two weeks ago, the patient was evaluated in the emergency department for diffuse abdominal pain and vomiting. A CT scan was obtained that was normal except for the adrenal mass. Three hours after presentation to the emergency department, the pain resolved spontaneously. Her medical history is significant for diet-controlled type 2 diabetes mellitus diagnosed 1 year ago and osteoporosis diagnosed 4 years ago. Her only medication is alendronate. On physical examination, temperature is 37.0 °C (98.6 °F), blood pressure is 120/80 mm Hg, and pulse rate is 70/min. BMI is 26. The remainder of the physical examination is normal. Laboratory evaluation reveals a serum sodium level of 139 mEq/L (139 mmol/L) and serum potassium level of 4.1 mEq/L (4.1 mmol/L). The previously obtained CT scan shows a 2.0-cm well-circumscribed, left adrenal lesion with a density of 5 Hounsfield units. In addition to screening tests for pheochromocytoma, which of the following is the most appropriate diagnostic test to perform next?

a. Adrenal vein sampling
b. Low-dose dexamethasone suppression test
c. Plasma renin activity and aldosterone concentration measurement
d. ACTH stimulation test
e. No further testing ?

- A-40-year old man post thyroidectomy for medullary thyroid carcinoma presents with hypertension and complains of attacks of sever headache and palpitations. He is noted to have glycosuria.

Which ONE of the following is most likely cause of his hypertension.?

a- Cushining syndrome.
b- Primary hyperaldosternosim.
c- Essential hypertension
d- Pheochromocytoma
e- Polyarteritis nodosa.

- All the following may be findings in primary hypoadrenalism (Addison's disease) Except.

a- hypernitremia with hypokalemia
b- palmer creases skin pigmentation
c- impotance and amenorrhoea
d- postural hypotension
e- weight loss

- The adrenal glands, one is correct:

A. The zona reticularis is the most important area in the cortex during embryogenesis
B. There is no relation between the adrenal cortex and the adrenal medullar regarding catecholamine synthesis a Wrong! Cortisol increases catecholamine systhesis.
C. Phechromocytoma is associated with high blood pressure and hyperkalemia
D. Atrophy of the glads is a late sign of autoimmune adrenalitis
E. Zona fasiculata is the place for adrenal androgen synthesis
Autoimmune adrenalitis (Addison's disease) can lead to atrophy of the adrenal glands over time as the immune system attacks the adrenal cortex.

- A18 year old patient is brought to the office because his mother is concerned he is entering puberty already. You examine him and note the beginnings of facial hair, axillary hair and Tanner stage 2external genitalia. Choose the set of investigations you initially want to do?

a. CBC, electrolytes, testosterone, bone age, CT head
b. FSH, LH, testosterone, electrolytes, bone age, DHEA-S ???
c. FSH, LH, testosterone, cortisol, DHEA-S, 11-OH progesterone,bone age ???
d. Electrolytes, testosterone, DHEA-S, 17-OHprogesterone, cortisol, bone age
e. CT brain, kidney function, bone densiometry

- A60-year-old man recently treated for renal tuberculosis, presents with weight loss, diarrhea, anorexia, and hypotension and is noted to have hyper pigmented buccal mucosa and hand creases.

ONE of the following is discriminating investigations which is useful in diagnosis :
a- Stool for ova, cysts and parasites.
b- Full blood count.
c- thyroid function test
d- Plasma ACTH and Cortisol
e- Blood cultures.

These tests are useful in diagnosing adrenal insufficiency. In Addison's disease, cortisol levels will be low, while ACTH levels are usually elevated due to lack of negative feedback from cortisol.

- Primary causes of hypoadrenalism include all of the following except Select one:

a. Addison's disease
b Hypopituitarism
c. intra-adrenal hemorrhage
d. Congenital adrenal hypoplasia
e Tuberculosis affecting the adrenal glands

- One of the following is not a feature of Addison's disease Select one:

a. Hyperpigmentation
b. Eosinophilia
C. Hypotension
d. Hyperglycemia
e Depression

- A 52year old man presents to accident and emergency after collapsing at home. He appears pale on appearance with cold extremities. Blood pressure is 97/73 mmHg, heart rate 110 bpm, temperature 36.9°C and an ECG shows normal findings. Blood culture and urine culture are negative for any findings. He reports returning from 10 days holiday break abroad, but forgot to take his medication for Crohn's disease with him. The most likely one diagnosis is?

a. Addisonian crisis
b. Sepsis
c. Myocardial infarction
d. Abdominal aneurysm rupture
e. Nelson's syndrome

- Pt come with presentation of Addison Dx by :

ACTH stimulation test ?

- Best diagnostic test for addison's :

Synacthen ACTH test ??!!

- In Addison's disease one is true:

a. Nausea and vomiting are early symptoms
b. ? ...

- In Addison disease, one is correct :

a. Hyperpigmentation of the gums and skin is secondary to the increased release of prolactin hormone...
b. Postural dizziness is a common feature in the history of a patient with Addison disease ?
c. Normokaleima is the rule unless there is recurrent vomiting
d. The ACTH level is normal in the later stage of disease
e. Hemorrhage into the adrenals is the most common cause

This deficiency leads to hypotension (low blood pressure), which can result in postural dizziness (orthostatic hypotension) when a person changes position from lying down or sitting to standing.

- All the following are causing hypokalemia Except.

a- Conn's syndrome
b- Addison'sdisease
c- B-agonist (salbutamol) therapy
d- Alkalosis
e- Thiazide diuretics

- One of the following is wrong :

Secondary adrenal insufficiency causes skin hyperpigmentation

- It's not a cause of hypokalemia :

adrenal insufficiency

- adrenal insufficiy wrong >

metablic alkalosis

- 26-year-old male patient is brought to the ER unconscious. He is diagnosed by the consultant as a case of adrenal crisis. What first step of management you will order the nurse assisting you?

Select one:
a. Administer IV normal saline bolus
b. Administer IV hydrocortisone
C. Administer mineralocorticoids
d. Administer TV glucose
e Administer V antibiotics

- Treatment of hyperkalemia include all the following Except.

a- i.v calcium gluconate
b- i.v salbutamol
c- i.v soluble insulin and glucouse
d- i.v hydrocortisone
e- hemodialysis

- Not in Treatment of siadh: Diuretics

Fludrocortisone ☑

Salt tablets

Fluid restriction

Fludrocortisone is not commonly used in the treatment of SIADH. It's typically used to treat conditions that involve adrenal insufficiency or certain types of low blood pressure (hypotension). Therefore, it is not appropriate for the treatment of SIADH.

* An 18-year-old woman is evaluated for primary amenorrhea. Her cognitive function is normal, and she is not sexually active. Her personal and family medical history is unremarkable. She takes no medications. On physical examination, temperature is 36.1 °C (97.0 °F), blood pressure is 110/70 mm Hg, pulse rate is 72/min, and respiration rate is 16/min; BMI is 20. Her height is 147 cm (58 in). Physical examination and secondary sex characteristics are normal, with Tanner stage IV breast and pubic hair development. Pregnancy testing is negative. On subsequent laboratory studies estradiol level was undetectable, serum follicle-stimulating

hormone level is 72 mU/mL (72 U/L), and serum luteinizing hormone level is 46 mll/mL (46 U/L). Which of the following is the most appropriate management?

a. Initiate estrogen and progestin therapy

b. Measure serum prolactin

c. Measure thyroid-stimulating hormone

d. Perform pituitary MRI

e. Measure serum FSH and LH

* A58 year-old man with a past history of a parathyroidectomy for primary hyperparathyroidism is now in your office complaining of headaches worse in the AM (made worse by a small MVA he credits to a loss of peripheral vision). You plan to?

a. Send to the Emergency Department for an immediate CT head

b. Check his calcium to ensure there's no remaining parathyroidtissue

c. Check for a pheochromocytoma (which you know causes H/As) because you are concerned he has MEN I syndrome

d. Check for a homonymous hemianopia because you are worried about a pituitary tumor

e. check for a bitemporal hemianopia because you are worried about a pituitary tumor

* Commonest pituitary Tumar .. prolactinoma / commonest hurmone .. prolactine

*

Mini-OSCE

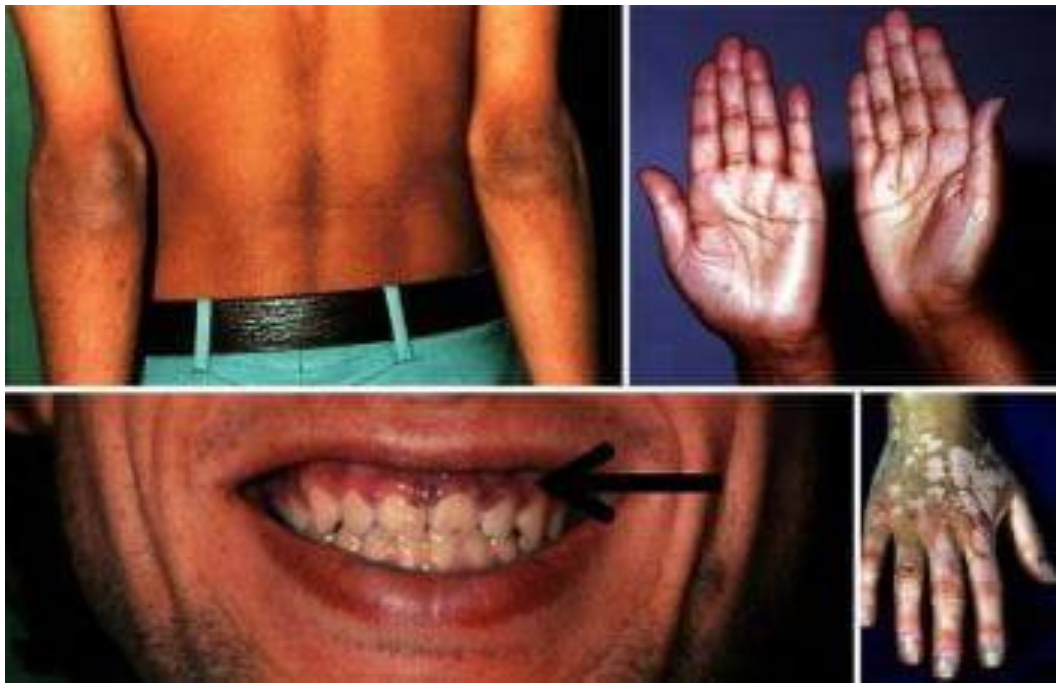
Patient with hypotension and hyperpigmentation

) what is your diagnosis? عليه اختلاف
(Addison disease) or (adrenal crises ,, 100% with hypotension)

2) give me 3 lab abnormality you will see in this patient ?
(hypo Na ,hyper K ,hypoglycemia)

3) what lab investigation you will order to confirm your diagnosis? (ACTH stimulation test)

4) give me 2 treatment for this patient? (Mineralocorticoid / corticosteroids)



Q 14

•What is the diagnosis ?

Addisons disease .

•Mention 1 test to confirm diagnosis ?

ACTH stimulation test

Station 4

Diagnosis :
adrenal insuffeciency (addisons disease)

Oral melanosis

Q4) a 30 year old diabetic patient patient comes to your clinic complaining of headache , weakness and dizziness , during inspection you see the following findings which are showed with these images .
What is your diagnosis based on these findings ?
a) Addison disease (hyperpigmentation of the skin and mucous membranes)
b) DKA

what you would not see in his lab test ?
a) Hypernatremia (cuz with Addison disease you always see Hyponatremia)

Patient present with hyperpigmentation and signs of hypotension

Q1 \ what is the diagnosis?

Addison disease (primary adrenal insufficiency)

Q2 \ what are the findings in hematological analysis?

1- eosinophilia

2- lymphocytosis

3- neutropenia

Q3 \ mention 2 line of management?

1- hydrocortisone

2- fludrocortisone

Q2 : this patient came to ER , extremely fatigue , confused with BP 90/50 , so How To manage and Diagnose ?

-100 mg Hydrocortisone

- The diagnosis will be done by combination of Hyperkalemia , Hypernatremia , Hypotension and Hypercalcaemia .

We can’t order ACTH stimulation test in ER situation .