

ENDOCRINOLOGY MCQs

1. Which is not a potential etiology of hypoglycemia in adults?
 - a) alcohol
 - b) salbutamol
 - c) insulinoma
 - d) salicylates
 - e) adrenal insufficiency
2. Which is the major precipitant of DKA?
 - a) infection
 - b) missed doses of insulin
 - c) AMI
 - d) Pancreatitis
 - e) PE
3. Which is not usually a feature of DKA?
 - a) seen type 1 diabetics mainly
 - b) serum osmolality 275-295mmol/l
 - c) fluid deficit usually less than that in HHNS
 - d) glucose usually lower than that in HHNS
 - e) acidosis
4. Which is not true regarding the management of DKA?
 - a) the administration of IV fluid immediately on arrival is the life saving event
 - b) fluid replacement should be 3-4 litres over the first four hours in a pt who is not shocked
 - c) even if the K⁺ is >5.5 potassium replacement should be commenced
 - d) the insulin bolus should be about 0.1 units/kg, with subsequent infusion at 0.1 units/kg/hr
 - e) cerebral oedema responds to mannitol
5. Which is not a feature of Hyperosmolar, hyperglycemic non ketotic states?
 - a) very high glucose, often greater than 40 mmol/l
 - b) pH>7.3
 - c) serum osmolality often greater than 350 mmol/L
 - d) low bicarbonate
 - e) lack of ketones in the urine
6. Which statement is false about the fluid deficit in HHNS?
 - a) it is usually 5L
 - b) if not shocked then 0.45% saline should be given
 - c) fluid replacement should always precede insulin therapy in the non shocked pt
 - d) fluid replacement should be done over a longer period of time than in DKA
 - e) normal saline should be given to the shocked patient
7. Which is not true about non ketotic hyperosmolar states?
 - a) these patients usually present with a GCS >8
 - b) total body potassium is not reduced as in DKA as there is no acidosis
 - c) focal neurological deficits are sometimes seen
 - d) they are prone to arterial and vascular thrombosis
 - e) insulin administration should be at the same rate as in DKA

8. Which is not true regarding drug therapy in diabetes?

- a) the use of ACEI even in normotensive patients, delays the onset of diabetic nephropathy
- b) the use of simvastatin in pts with CHD significantly reduces the risk of future CHD
- c) sulphonylureas stimulate the pancreatic secretion of insulin
- d) Acorbase(Glucobay) interferes with GIT absorption of carbohydrate
- e) Metformin is an oral insulin analogue

9. The nitroprusside dipstick test of the urine measures?

- a) acetoacetate
- b) beta hydroxybuterate
- c) acetone
- d) A and C
- e) All of the above

10. Which is not a feature of alcoholic ketoacidosis?

- a) Dehydration
- b) Positive dipstick for ketones
- c) ABG = acidosis, alkalsos or normal
- d) Increased anion gap, regardless of pH
- e) hyperglycemia

11. Which is false regarding alcoholic ketoacidosis?

- a) it is usually seen in chronic alcoholics
- b) usually there has been a recent cessation in drinking with several days of vomiting and poor oral intake
- c) Thiamine should be given
- d) Mainstay of treatment is IV fluids, including dextrose
- e) Low dose insulin given judiciously hastens recovery

12. Which is the most common precipitant of alcoholic ketoacidosis?

- a) pancreatitis
- b) GI bleed
- c) Alcohol withdrawal without precipitating illness
- d) Infection
- e) hepatitis

13. Using the answers to question 9, what ketoacids are produced in AKA? Why is this important?

14. Which may not cause an adrenal crisis?

- a) Waterhouse Freidrichson syndrome
- b) Sheehans syndrome
- c) Acute discontinuation of steroids therapy
- d) Anticoagulant use
- e) Fulminant septicemia

15. What biochemical abnormality is possible in an Addisonian crisis?

- a) hyponatremia
- b) hypokalemia
- c) hypoglycemia
- d) normokalemia and normonatremia
- e) all of the above

16. Which statement is incorrect with regards to treatment of an Addisonian crisis?

- a) i.v. normal saline should be given to treat shock
- b) i.v. dextrose will also be required
- c) i.v. fludrocortisone is required
- d) i.v. dexamethasone or hydrocortisone should be given
- e) flouxymesterone (androgen replacement) does not need to be given

17. Which is false about chronic steroid administration and illness?

- a) no suppression of the pituitary-adrenal axis occurs if the dose is <10mg regardless of the duration of administration
- b) no suppression of the axis occurs regardless of the dose as long as it is taken for less than 3 weeks
- c) in a time of physical stress the glucocorticoid dose should be increased 2-3 times for a few days
- d) in a time of physical stress the mineralocorticoid dose should be increased 2-3 times for a few days
- e) there is no need for glucose supplementation when physical stress occurs

18. Which statement is false about pheochromocytomas?

- a) clinically they may present with attacks of pallor, palpitations, sweating, headache and anxiety
- b) clinically they present with hypertension alone, or sometime abdominal pain and vomiting
- c) investigations include urinary VMA and catecholamines
- d) beta blockade is the temporary treatment of choice and possibly long term
- e) the treatment of choice is surgical resection

19. Which is the most common cause of hyperthyroidism in Australia?

- a) Graves disease
- b) Toxic multinodular goiter
- c) Toxic adenoma
- d) Pituitary aetiology
- e) Excess iodine

20. Which is not a feature of hyperthyroidism?

- a) lid lag
- b) lid retraction
- c) amenorrhea
- d) peripheral neuropathy
- e) hyperreflexia

21. Which agent should not be used in the treatment of a thyroid storm?

- a) propranolol
- b) propylthiouracil
- c) steroids
- d) salicylates
- e) panadol

22. Which is false regarding the treatment of a myxoedema coma?

- a) thyroxine should be given i.v. initially
- b) thyroxine should be given in full dosage prior to blood results
- c) steroids should be given
- d) hyponatremia should be treated with fluid restriction
- e) dextrose may be required

23. Which is not a feature of hypothyroidism?

- a) loss of outer third of the eyebrow
- b) bradycardia
- c) ophthalmopathy
- d) weight gain
- e) constipation

24. Which drug is not a possible precipitant of myxoedema coma?

- a) lithium
- b) amioderone
- c) benzodiazepines
- d) phenytoin
- e) ranitidine

ANSWERS

1)B 2)A 3)B 4)C 5)D 6)A 7)B 8)E 9)D 10)E 11)E 12)A
13)B 14)B 15)E 16)C 17)D 18)D 19)A 20)D 21)D 22)B 23)C 24)E

Endocrine MCQ's

1. Which is incorrect regarding hypoglycaemia?
 - a. Metformin rarely causes hypoglycaemia.
 - b. Ethanol abuse inhibits hepatic gluconeogenesis producing hypoglycaemia.
 - c. Glucagon 1 mg IM will take approx 1-2 mins to normalize neuro state.
 - d. If the hypoglycaemia is resistant to large amounts of glucose steroids should be given.
 - e. Venous blood glucose is 10% lower than arterial.

2. Which is incorrect regarding DKA?
 - a. Pregnancy increases the likelihood of DKA.
 - b. DKA usually involves a combined high anion gap metabolic acidosis and hyperchloremic acidosis.
 - c. Total body potassium is usually low.
 - d. Measured serum potassium is usually low.
 - e. Urine dipsticks only detect acetoacetone and not beta hydroxy butyrate.

3. Which is incorrect regarding cerebral oedema in treatment of DKA?
 - a. Usually occurs in the first 24 hrs when patient improving.
 - b. Mortality is about 7%.
 - c. Older patients are more at risk.
 - d. 50% will develop some premonitory symptoms e.g. severe headache, incontinence, seizures etc.
 - e. Initial treatment consists of stopping fluids and mannitol 1-2 mg/kg.

4. Which is not a feature of HONK as compared to DKA?
 - a. Usually affects patients with type 2 diabetes.
 - b. Blood glucose is usually higher than DKA often >40mm/l
 - c. Usually develops over a longer time than DKA.
 - d. Mortality rate is up to 4 times higher.
 - e. Fluid deficit is usually less than DKA.

1=c 2=d 3=c 4=e