

26- pregnancy and hormonal replacement

DEPARTMENT OF PHARMACOLOGY (DPT-6)

SHORT ESSAY QUESTIONS

(Drugs acting on endocrine and respiratory system)

Time allowed: 60

3
Endo

- Q1 a) Classify Oral hypoglycemic drugs. What is the mechanism of action of Sulfonylureas. Pg 349K 2+
- b) Enumerate four clinical uses of Insulin. Pg 348 2
- Q2 a) Explain the Mechanism of Action and clinical uses of following drugs: 4+4
- i) Clomiphene citrate Pg 333K ii) Tamoxifen. Pg 311 Androgen ultra-steroid 10
- b) Write down two contraindications of combined oral contraceptives. 1
- Q3. Enumerate the following: 3+3
- a) Adrenal uses of Glucocorticoids Pg 325 ii) Insulin preparations according to duration of action 3+1
- Q4. How does Glucocorticoids exert their anti-inflammatory and immunosuppressive effects? 2
- Q5 a) Classify drugs used for Hyperthyroidism. Pg 316 + thyroxine thyron 1
- b) Describe the mechanism of action and clinical uses of Propylthiouracil. Pg 318 3
- Q6. Write down the mechanism of action of following drugs: 4
- i) Cromolyn sodium Pg 176 ii) Aminophylline Pg 174 2+2
- Q7 a) How will you treat a patient suffering from Status Asthmaticus. Pg 174 3
- b) Enumerate two long acting β_2 agonists used for treatment of bronchial asthma. 1

Albuterol
Mometasone

Salbutamol
Terbutaline



Endocrinology

Zaim Jauhar (14)

1 Which of the following best describes the effect of propylthiouracil on thyroid hormone production?

- A. It blocks the release of thyrotropin-releasing hormone.
- B. It inhibits uptake of iodide by thyroid cells.
- C. It prevents the release of thyroid hormone from thyroglobulin.
- D. It blocks iodination and coupling of tyrosines in thyroglobulin to form thyroid hormones.
- E. It blocks the release of hormones from the thyroid gland.

2 A 64-year-old woman with a history of Type 2 diabetes is diagnosed with heart failure. Which of the following drugs would be a poor choice in controlling her diabetes?

- A. Sitagliptin.
- B. Exenatide.
- C. Glyburide.
- D. Glipizide.

E. Pioglitazone.

3 Which of the following statements is true for therapy with insulin glargine?

- A. It is primarily used to control prandial hyperglycemia.
- B. It should not be combined with any other insulin.
- C. It is now used preferentially in Type 1 diabetics who are pregnant.
- D. Pharmacokinetically, there is no peak activity, and the activity lasts about 24 hours.
- E. It is effective by inhalation.

4 A child with asthma is being treated effectively with an inhaled preparation of beclomethasone dipropionate. Which of the following adverse effects is of particular concern?

- A. Hypoglycemia.
- B. Hirsutism.
- C. Growth suppression.
- D. Cushing's syndrome.
- E. Cataract formation.

5 Which of the following drugs specifically inhibits calcineurin in the activated T lymphocytes?

- A. Daclizumab.
- B. Cyclosporine.
- C. Prednisone.
- D. Sirolimus.
- E. Mycophenolate mofetil.

6 A patient is being treated with allopurinol to control hyperuricemia resulting from chemotherapy. Which of the following would have to have its dose reduced to prevent toxicity?

- A. 5-FU.
- B. 6-MP.
- C. 6-TG.
- D. Fludarabine.
- E. Cytarabine.

7 Mucositis develops in a patient undergoing cancer chemotherapy with methotrexate. Administration of which one of the following agents would help?

- A. Leucovorin.
- B. Filgrastim.
- C. Prednisone.
- D. Vitamin B₁₂.

8 Which of the following drugs is recommended for the treatment of severe, multidrug-resistant Plasmodium falciparum malaria?

- A. Artemisinin.
- B. Chloroquine.
- C. Quinine.
- D. Sodium stibogluconate.
- E. Primaquine.

9 A 36-year-old male of Lebanese ancestry is being treated for Plasmodium vivax malaria. He experiences severe fatigue, back pain, and darkened urine. Which one of the following antimalarial drugs is most likely to have caused his symptoms?

- A. Pyrimethamine.
- B. Artemisinin.
- C. Chloroquine.
- D. Quinine.
- E. Primaquine.

10 Hyperthyroidism can be treated by all but which one of the following?

- A. Triiodothyronine.
- B. Surgical removal of the thyroid gland.
- C. Iodide.
- D. Propylthiouracil.
- E. Methimazole.

11 Which one of the following hormones is a non-peptide, allowing oral administration?

- A. ACTH
- B. Growth hormone
- C. GnRH
- D. Thyroxine
- E. CRH

12 The ability to reduce insulin resistance is associated with which one of the following classes of hypoglycemic agents?

- A. Meglitinides.
- B. Sulfonylureas.
- C. Glucosidase inhibitors.
- D. Thiazolidinediones.
- E. Gastrointestinal hormones.

13 Estrogen replacement therapy in menopausal women:

- A. Restores bone loss accompanying osteoporosis.
- B. May induce hot flashes
- C. May cause atrophic vaginitis.
- D. Is most effective if instituted at the first signs of menopause.
- E. Requires higher doses of estrogen than with oral contraceptive therapy.

14 A 23-year-old woman has failed to become pregnant after 2 years of unprotected intercourse. Which of the following would be effective in treating infertility due to anovulatory cycles?

- A. A combination of an estrogen and progestin
- B. Estrogen alone.
- C. Clomiphene. → ovulation inducer
- D. Raloxifene.

15 Young athletes who abuse androgens should be made aware of the side effects of these drugs. Which one of the following is, however, not of concern?

- A. Increased muscle mass.
- B. Anemia due to bone marrow failure.
- C. Overly aggressive behavior.
- D. Decreased spermatogenesis.
- E. Stunted growth.

16 Osteoporosis is a major adverse effect caused by the glucocorticoids. It is due to their ability to:

- A. Increase the excretion of calcium.
- B. Inhibit absorption of calcium.
- C. Stimulate the HPA axis.
- D. Decrease production of prostaglandins.

17. A 22-year-old man, who frequently backpacks, complains of diarrhea and fatigue. Examination of stool specimens shows binucleate organisms with four flagellae. Which one of the following drugs would be effective in treating this patient's infestation?

Phalco

- A. Metronidazole.
- C. Pentamidine.
- E. Stibogluconate.

- B. Quinidine.
- D. Sulfadoxine.

18. Hydration and/or diuresis can prevent the renal toxicity associated with:

- A. Cisplatin.
- B. Chlorambucil.
- C. Tamoxifen.
- D. Gemcitabine.

19. Which of the following drugs used to prevent allograft rejection can cause hyperlipidemia?

- A. Azathioprine
- B. Basiliximab.
- C. Tacrolimus.
- D. Mycophenolate mofetil.

20. Dexrazoxane is protective against cardiotoxicity caused by:

- A. methylprednisolone.
- B. Anthracyclines
- C. Topotecan
- D. sirolimus

21. The plant derived anti cancer agents that act in M phase of cell cycle and arrest polymerization of tubulin are:

- A. Anthracyclines
- B. Vinca alkaloids
- C. Camptothecins
- D. Epipodophylotoxins

22. Administration of acid reducing drugs like omeprazole may result in reduced absorption of:

- A. Iron
- B. Vit B12
- C. Vit B6
- D. Mg

23. The acid suppressing drugs which are used in peptic ulcer disease and in eradication regimen for H. Pylori are:

- A. Antacids
- B. PPIs
- C. H2 blockers
- D. Antimuscarinic

24. Which of the following drugs is contraindicated in patients with glaucoma?

- A. Estrogens
- B. FSH and LH
- C. Glucocorticoids
- D. Insulin

25. Oral contraceptives are not used for

- A. Menstrual regulation
- B. Treatment of breast carcinoma
- C. Contraception
- D. Dysmenorrhea