



Endocrine System

-Final Exam-

Coordinator: Dr. Fatimah Almahasneh

Collected by: GLORIANS TEAM

Batch: Glory - 2017

Anatomy - Histology - Embryology

Dr. Ramada

- 1) All of the following is secreted by anterior pituitary except:
 - ADH
 - 2) All of the following are true according to endocrine except:
 - Pineal gland is part of endocrine
 - Glands secrete chemical substances
 - hormones are secreted by blood
 - Has fast onset of action
 - 3) All of the following are from thyroid lymph vessels except:
 - Paralaryngeal
 - 4) Cells secrete insulin:
 - B cells
 - 5) Which of these actions occur in thyroid gland between 5-6 week of fetal life:
 - Migration down to the neck
 - 6) Formation of zona reticularis occur in:
 - 1 year after birth
 - 2 year after birth
 - 3 year after birth
 - Fetal cortex
 - 7) Thymus overlies which of the followings:
 - Pericardium
 - Aorta
 - Trachea
 - Two answers are correct
 - All answers are correct
 - 8) All of the following are true about oxiphil cells except:
 - larger than chief cells
 - less numerous than chief cells
 - Present In cluster
 - Have very acidophilic cytoplasm
 - Has granules contain PTH
-

Physiology

Dr. Fatimah Almahasneh

- 9) MOA of 1,25- dihydrocholecalciferol:
 - Stimulate the expression of a number of gene products
- 10) PTH can be stimulated by:
 - Increased plasma phosphate level

11) false about bone physiology:

- Acid protease break down hydroxyapatite
- proton pump merge to sealing zone.

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12) Magnocellular neurons:

- Neurosecretory cells produce the neurohypophysis hormones in the hypothalamus

13) Oxytocin hormone:

- milk production
- myoepithelial cells contraction in mammary glands
- express milk into the ducts
- c + b

14) GH fails to promote growth in animals that:

- have severe hepatic problems
- lack pancreas
- depend on fats and proteins as a source of energy
- b + c

15) One of the following enzymes is inactivated by insulin:

- liver phosphorylase

16) One of the following is true about Ca homeostasis:

- vit D increases intestinal ca absorption
- calcitonin increases bone resorption
- PTH enhances bone resorption and induce ca mobilization
- two choices are true

17) One of the following conditions stimulate PTH release:

- high serum ca levels
- Mg deficiency
- vit D
- high plasma phosphate

18) Stretch receptors:

- enhances ADH release
- also called baroreceptors
- in carotid and pulmonary arteries
- excited by overfilling

19) ADH:

- requires 30_60 min to reach its full action
- marked alteration of renal solutes excretion
- low concentrations induce vasoconstriction
- provide temporary pores in the renal epithelial cells allowing water reabsorption

20) In Normal individuals Cortisol does not induce significant mineralocorticoid effect because;

- low serum levels
- is converted into cortisone by renal epithelial cells

21) One of the following statements is true about Cortisol:

- it is regulated by positive feedback
- stress increases its release by inducing Direct effect on adenohipophysis
- ACTH acts by cAMP/PKA ✓

22) Adenohipophysis is connected with the hypothalamus by:

- systemic circulation
- neural link
- hypophyseal-hypothalamic portal circulation ✓

23) GH secretion rate is characteristically increases during;

- early sleeping hrs ✓

24) GH promoting actions on skeleton include:

- increase chondrocyte and osteoblasts reproduction rates
- increase bone thickness
- converts chondrocytes into osteogenic cells
- All the above ✓

25) One of the following is INCORRECT regarding glucocorticoids actions:

- stimulates protein catabolism in all body tissues ✓

26) One of the following is INCORRECT about IGF:

- its effect on growth are similar to the effects of insulin
- alternative means of increasing growth but not always a necessary one
- majority is synthesized locally on the target tissues ✓

27) One of the following statements is true about aldosterone:

- cause transient Na retention
- acts mainly on principal cells of collecting tubules
- -
- all the above ✓

28) All the following are false except

- T4 has a longer half-life than T3 ✓
- Almost all thyroxin converted to the T3 ✓

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29) The second messenger in phospholipid systems is:

- IP3
- DAG
- Ca+
- All ✓

30) Thyroid hormones functions

Enzymatic and other functions of these new proteins اتوقع هاد الجواب

الخيارات الثانية ... انه بس يشتغل .. genomic وبزيد ال HR من خلال زيادة ال co only

31) insulin action:

- Glycogenesis ✓
- protein synthesis and storage ✓

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32) Which of the following is the function of peroxidase enzyme:

- oxidation of iodine
- organification
- two choices are correct ✓

الدكتورة اعتمدت الجواب:
two choices are correct



Pathology

Dr. Doaa

33) Hashimoto's thyroiditis:
Autoimmune destruction ✓

34) Neuroblastoma mutation:

- N-myc ✓
- C-myc
- S-RAS
- BTEN

35) Hypothyroid patient, iodide deficiency:

- Decrease T4, increase TSH ✓

36) What is wrong about adrenal CA:

- Localized invasion ✓
- Functioning or not functioning
- Large size
- Yellowish in color

37) Diagnosis depend on Vascular or Capsular invasions:

- Follicular CA ✓
- Papillary CA
- Medullary CA
- Anaplastic CA

38) Secondary Parathyroid gland hyperplasia due:

- Low Ca⁺⁺ serum ✓

39) Intractable peptic ulcer with gastrin hyper secretion:

- Zollinger-Ellison syndrome ✓

40) Diabetes insidious is not:

- related to damage in anterior pituitary ✓
- related to ADH deficiency

41) Metastatic calcification (as a result of hyperparathyroidism) in all of the following, except:

- Stomach
- Floor of mouth ✓
- Lung
- Systemic arteries

42) Galactorrhea is due to:

- Prolactinoma ✓

43) The wrong statement about gigantism:

- Growth hormone secreting adenoma in children and adults ✓

44) something about stalk effect, which hormone responsible...

- prolactin ✓

45) Chronic adrenal insufficiency result from all except:

- Primary tumor ✓
- simple atrophy
- TB
- Metastatic tumor

بعد مناقشة الدكتورة بخصوص سؤال 45 هيك كان ردها:

Atrophy leads to hypofunction and Autoimmune disorders leads to atrophy of the gland. But primary tumors of suprarenal adenoma or carcinoma and these associated with hyperfunction Atrophy not occur sudden on short time but on long time.

46) Case about women who was taking CS, what we will find?

- Atrophy of adrenal cortex ✓

47) Intracellular hyperglycemia induces VEGF that result in:

- New B.V formation ✓
- anticoagulant activity
- decrease permeability
- decrease fibrosis

48) Result of hyperaldosteronism:

- Hyperkalemia
- Hypotension
- hyperglycemia
- Hypokalemia ✓

49) Malignancy in pheochromocytoma confirmed by:

- Metastasis ✓

50) Right about Crooks hyaline change:

- Accumulation of intermediate keratin filaments ✓
- Dark granular basophilic
- Cushing Syndrome related

Crooks hyaline change is a type of negative feedback on ACTH secreting cells of pituitary it is decrease in basophilic secretory granules and cytoplasm contain keratin instead it is a type of hyaline change. It is a type of cell degeneration Cushing disease is a reverse there is proliferation and increased function of ACTH secreting cells forming adenoma no crooks hyaline cells رد الدكتورة

51) Common cause for Type 2 diabetes:

- Overweight ✓

52) Diagnosis depend on nuclear features:

- papillary CA ✓

53) Hand - schüller - Christian disease:

- Systemic langhans cell histiocytosis ✓

Pharmacology

Dr. Romany

54) Which ONE of the following drug/therapeutic indications pairs is mismatched?

- Triamcinolone – skin allergies
- Metformin – obese NIDDM
- Rosiglitazone – Diabetic with heart failure ✓
- Eplerenone – Hypertension

- Propranolol – thyroid storm

55) Pegvisomant is approved for the treatment of which of the followings?

- Diabetes insipidus
- Nocturnal enuresis
- Prader-Willi syndrome
- VIPomas
- Acromegaly

56) In an infertile male with hypogonadism lacking gonadotropins due to a pituitary disorder, the following is an appropriate therapy

- Injection of menotropin till external sexual maturation with subsequent injection of hCG
- hCG injection till external sexual maturation with subsequent injection of hMG or follitropin
- maintained with hCG injection till external sexual maturation
- maintained with menotropin injection till external sexual maturation
- maintained with follitropin till external sexual maturation

57) A patient suffering from thyroid storm is treated with a drug that inhibits both thyroid gland peroxidase, and the peripheral deiodination of T₄ to T₃. Which one of the followings is that drug?

- Methimazole
- Potassium iodide
- Propylthiouracil
- Radioactive iodine
- propranolol

58) The most reliable guide to adjustment of thyroxine dose in a patient of hypothyroidism is

- Pulse rate
- Body weight
- Serum T₄ level
- Serum T₃ level
- Serum TSH level

59) ONE of the followings is WRONG with regard to drugs/hormones affecting calcium homeostasis

- The primary action of parathormone is to increase resorption of calcium from bone
- The most suitable vitamin D preparation for treatment of rickets is calcipotriol
- Calcitonin is used in treatment of hypercalcemia by increasing renal calcium excretion
- In low and intermittent doses, PTH increase bone formation
- Calcitriol is used to manage the hypocalcemia accompanying chronic renal disease

60) Which ONE of the following antidiabetics inhibits intestinal brush border alpha glucosidase enzymes thus inhibits postprandial hyperglycemia?

- Pramlintide
- Acarbose
- Liraglutide
- Vildagliptin
- repaglinide

61) among the following steroids, which ONE has the highest anti-inflammatory activity?

- Betamethasone
- Fludrocortisone

- Hydrocortisone
- Prednisone
- Prednisolone

62) A 46-year-old male patient has Cushing's syndrome that is due to the presence of an adrenal tumor. Which of the following drugs would be expected to reduce the signs and symptoms of this patient's disease?

- Betamethasone
- Fludrocortisone
- Fluticasone
- Ketoconazole
- triamcinolone

63) For patients who have been on long-term therapy with glucocorticoid and who now wish to discontinue the drug, gradual tapering of the glucocorticoid is needed to allow recovery of

- Depressed release of insulin from pancreatic Beta islets
- Hematopoiesis in the bone marrow
- Normal osteoblast function
- The control by vasopressin of water excretion
- The hypothalamic-pituitary-adrenal system

64) Which of the following oral antidiabetic agents would be unlikely to raise insulin concentrations in type 2 diabetic patients?

- Sulfonylureas
- Meglitinides
- Gliptins (DPP-4 inhibitors)
- Metformin and Glitazones
- None of the given options

65) Which of the following oral antidiabetic agents are often associated with weight gain in type 2 diabetic patients

- Metformin
- α -Glucosidase inhibitors
- Gliptins (DPP-4 inhibitors)
- Sulfonylureas and Glitazones
- All of the given options

66) ONE of the followings is an inhaled steroid used in treatment of bronchial asthma

- Prednisone
- Fludrocortisone
- Beclomethasone
- Dexamethasone
- cortisone

67) Toxicity of which ONE of the followings is most likely similar to that of glucocorticoids?

- Nafarelin
- Octreotide
- Urofollitropin
- Cosyntropin
- Cabergoline

68) A young married couple has been unable to conceive after 3 years of unprotected intercourse. The husband's sperm count is normal. They both agree they would like the wife to undergo fertility treatment. Which of the following drugs has the ability to either stimulate or inhibit ovulation depending only on the dosing schedule?

- Bromocriptine
- Chronic gonadotropin (hCG)
- Leuprolide
- Desmopressin
- corticotropin

69) which of the following best describes the effect of propyl thiouracil on thyroid hormone production:

- It inhibits uptake of iodide by thyroid cells
- It blocks the release of thyrotropin releasing hormone
- It prevents the release of thyroid hormone from thyroglobulin
- It blocks iodination of and coupling of tyrosine in thyroglobulin to form thyroid hormone
- It blocks the release of hormones from the thyroid gland

70) Which of the following conditions is an indication for the use of calcitonin?

- Hypocalcemia
- Hypoparathyroidism
- Chronic renal failure
- Stunted growth in children
- Paget's disease of bone

71) Sulfonylureas are a primary mode of therapy in the treatment of

- Insulin-dependent (type 1) diabetes mellitus (IDDM) patients
- Diabetic patients experiencing severe hepatic or renal dysfunction
- Diabetic pregnant women
- Patient with diabetic ketoacidosis
- Non-insulin-dependent (type 2) DM patients

Biochemistry
Dr. Zaid

72) Steroid hormones have _____ Half life while peptide and protein hormone have _____ half life

- long, short

73) The enzyme that is responsible about dopamine conversion into NE is:

- beta dopamine hydroxylase

74) Except in starvation conditions, _____ is the primary source of energy in the brain:

- Glucose

75) 11 hydroxylase enzyme converts 11-deoxycortisol and 11-deoxycorticosterone to:

- Cortisol, corticosterone

76) Which of the following use two different Abs:

- I Direct ELISA
- II competitive

- III Sandwich
- III & II

77) Which of the following act by Jak pathway:

- GH
- interferon
-
- all the above

78) Regarding steroid hormones, one of the following statements is true:

- protein receptors, in the cytoplasm

79) The main androgens precursors in testis is

- DHEA

80) The main mechanism for testicular testosterone synthesis is:

- DHT
- DHEA pathway = delta 5 pathway

81) One of the following dose not act by cAMP

- NO (nitric oxide)

82) Question about phosphodiesterase

- Breaks down phosphodiesterase bond
- converts cAMP to 5'AMP (علا غلب)
- converts inactive PKA C2R2 into its active form
- two choices are true
- None of the above

83) Insulin has an AB heterodimeric structure with one intrachain (A6–A11) and two interchain disulfide bridges (A7–B7) and (A20–B19) trypsin-like, How many disulfide bonds? 😊!?

- 0
- 1
- 2
- 3

هل الدكتور طالب نوع الرابطة (يعني الجواب 1) ولا كم عدد الروابط (يعني نجمعهن والجواب 3) السؤال مش واضح ابدا، يعني بنعرف نجمع عفكرة فالمفروض بيسال عن نوع الرابطة
علا غلب الجواب المعتمد 3 والله اعلم 🙏

Public health
Dr. Moawiah Khatatbeh

84) One of the following statements is INCORRECT:

- dying rate in Jordan as a result of 4NCDs us 10%

85) One of the following statements is INCORRECT:

- half of DM ptns live in urban countries

86) One of the following is INCORRECT:

- MeS increases the risk of communicable diseases

87) One of the following is INCORRECT:

- Obesity prevalence among school children in Jordan is 17%

88) ABCDE represents the means of MeS management, D represents drug therapy

- True
- False ✓

Sorry for any mistake

Good luck ❤️

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