

- Endocrine System – Theory Exam – Pulse Batch

* Physiology :

- Which of the following would increase if the pituitary is transplanted under the kidney tissue :

Answer : increase prolactin

- What biochemical findings correlate with cushing's DISEASE :

Answer : high cortisol, high ACTH, low CRH

- Mutation in Pendrin gene will result in :

A) decrease iodine intake

B) goiter

Answer : B

- What's the most likely finding in a patient with dwarfism :

A) Hyperlipidemia

B) Hyperinsulinemia

C) Hyperglycemia

D) increased lean body mass

E) ketonemia

Answer : A

Note : they give one mark bonus for this qus cause the difficulty index was high (not to many students answer it correct)

- Patient with puffy skin and hoarse voice .. Concentration of TSH was low ... we gave TRH then we found that TSH was increased What is true :

A) primary hypothyroidism duo to problem from thyroid

B) secondary hypothyroidism duo to problem from pituitary

C) hypothyroidism duo to abnormality in the hypothalamus

D) hyperthyroidism duo to problem from hypothalamus

E) hyperthyroidism from thyroid tumor

Answer : C

- Which of the following is correct regarding Glucagon :

Answer : secreted in the presence of Amino Acids

Exam Details :

Num of qus	60
Duration	65
Dr :	
Anatomy	Dr.Alloh + Ayman
Pharma	Dr.Abdallah al zoubi
Physio	Dr.Ahmad al tarifi+ Othman
Patho	Dr.Najla al dawod
Biochm	Dr.Mohammad nusair

- Regarding signal transduction in growth hormone receptors in target cells , which of the following appears in acromegaly as an increased step :

Answer : increase in Jak/Stat pathway

- Which of the following is correct regarding insulin :

Answer : increase lipoprotein lipase in adiposities

- which of the following dose not increase somatotropin secretion :

Answer : cortisol

- inactivating Mutation in 1 alpha hydroxylase , will result in all of the following except (if u know that this enzyme converts (25_hydroxy vit D) into (1,25_dihydroxy vit.D) :

A) affect the absorption from intestine

B) parathyroid stimulation causing increase PTH

C) parathyroid inhibition causing decrease PTH

Answer : C

- The missing feature of secondary adrenal insufficiency :

A) Metabolic acidosis

B) Hyponatremia

C) skin pigmentation

D) hypovolemia

Answer : C

- Patient with PTH deficiency after 10 days of thyroectomy , will have which of the following :

Answer : low Ca and increase muscle excitability

- Which of the following cause increase in Vasopressin secretion :

A) plasma osmolarity increase

B) plasma osmolarity decrease

Answer : A

- IF we give a person PTH , what will happen :

Answer : increase the number of active osetoclasts

- Which of the following will cause the most effect in PTH secretion :

A) total Ca

B) Ca ++ (ionized free ca)

Answer : B

- insulin is secreted from B cells after :

- A) Depolarization
- B) activation of voltage gated Ca channels
- C) inhibition of ATP sensitive K channels

Answer : C

- which of the following represent negative feedback control :

Answer : Decrease in ACTH release when there is high water absorption in kidney

- in the Chromaffin cells in the adrenal medulla ; which ions influx is important :

Answer : Ca

- in a transgenic mouse , they induce an activating mutation in PMNT enzyme , that leads to increase in epinephrine , all of the following will happen , except :

Answer : obesity

- which of the following is not expected in patients with Conn's syndrome :

- A) high k in urine
- B) High urine PH

Answer: B

- insulin secretion is greatest after :

- A) Oral glucose
- B) IV glucose

Answer : A

- which of the following is not an effect of cortisol :

Answer : increase the effectiveness of neutrophils

* Anatomy :

- which of the following developed from neural crest cells :

- A) anterior pituitary
- B) posterior pituitary
- C) chromaffin cells of the adrenal medulla
- D) pictocytes

Answer : C

- which of the following is wrong regarding pancreatic islets :

Answer : originate from mesoderm

- which organelle is modified for steroid synthesis in the adrenal cortex :

Answer : mitochondria

- glial cells in pineal gland are :

Answer : Astrocyts

- which of the following risks of thyroid gland surgery is associated with clinical signs in muscles :

Answer : incidental removing of PTH gland

- which part of pituitary form a sheath around the stalk :

Answer : pars tuberalis

* Pharma :

- which of the following is incorrect :

Answer : iodide is indicated in maintenance therapy

- Which of the following may increase the chance of hypothalamic pituitary axis inhibition :

Answer : stimulate the circadian rhythm by giving the cortisol at 11 PM

- pregnant women in 3rd trimester , with ashma , come to hospital cause of severe chest infection ,all of the following can be done except :

Answer : short corse of predinialone

- insulin lispo ; which of the following is correct :

a) taken 1-2hrs before meals

B) long acting

C) taken only sc

D) faster absorbtion than soluble insulin

Answer : D

- which of the following is incorrect regarding the Ca drugs is incorrect :

Answer: calcimemetics they compete on Ca receptor in parathyroid

- All of the following regarding metformin are correct , except :

A) it stimulate glycolysis

B) it does not promote insulin secretion

C) it increase insluin binding to insuulin receptor

D) it increases hepatic gluconeogenesis and increase hepatic glucose output

Answer : D

- Regarding Glemperide , which of the following is correct :

A) increase glucose uptake by muscles (key answer)

B) decrease liver output of glucose

Answer : both answers are correct

Note : they count those 2 answers as correct

- Pegvisoment used in treatment of :

Answer : resistant acromegaly

- which of the following is true regarding hyperthyroidism treatment :

Answer : PTU causes severe liver toxicity

- which of the following is true regarding livothyroxin :

Answer : started at lower doses in patients with cardiac problems

- which of the following is correct regarding teriparatide :

Answer : it may lead to osteosarcoma , as some reports mentioned this in rats

- which of the following is incorrect regarding glucocorticoids and aldosterone :

Answer : good oral bioavailability

* Pathology :

- MEN2A and MEN 2B is associated with mutation in :

Answer : RET gene

- The type of carcinoma is associated with BRAF mutation is :

- A) Follicular adenoma
- B) Follicular carcinoma
- C) Medullary carcinoma
- D) Anaplastic
- E) papillary carcinoma

Answer : E

- all of the following are associated with decrease sensitivity to insulin ; except :

- A) resistin
- B) adionectin
- C) Fatty Acid

Answer : B

Note for next year students : regarding liptin , it was not one of the choices , and the dr's said if they want to ask about this topic they won't ask about liptin cause it's different between patho and physio

- which of the following is most characteristic for type 2 DM more than type 1 :

Answer : Amyloid

- the most common tumor in thyroid gland to be Familial is :

Answer : Medullary

-all of the following are true about pit. Adenoma except :

- A) Represent 10% of intracrainial malegnancies
- B) 25% are incidental
- C) almost always functional
- D) encapsulated
- E) adenoma is an adenoma benign هيك كان الخيار بالامتحان .. المقصود انه

Answer : C

- ostatis fibrosa cystic is associated with :

Answer : hyperparathyroidism

- In tertiary hyperthyroidism , there is :

Answer : high TSH

- which of the following is implicated in pathogenesis of microvascular complications in diabetes

- A) advanced glycation products
- B) polyol pathway
- C) protein kinase C
- D) all of the above

Answer : D

- which of the following hormones act on membrane receptor :

Answer : GH

- paraganglioma tumor mostly found in :

- A) Carotid
- B) aortic

Answer : A

*** Biochem :**

- which of the following has synergistic effect on insulin release :

- A) GH & glucose
- B) Ach & glucose

Answer : B

Note : we discussed this question with the doctor regarding choice A, it's not correct because glucose will inhibit GH, so they don't have a synergistic effect.

- The enzyme that is associated with de novo synthesis of cholesterol (rate limiting step) is :

Answer : HMG -coA reductase

- The rate limiting step in steroid synthesis is :

- A) conversion of cholesterol → pregnenolone
- B) transport of cholesterol from cytoplasm into mitochondria

Answer : B

- Enzymes for synthesis of steroid are found in :

- A) mitochondria & SER
- B) Mitochondria & RER
- C) nucleus
- D) plasma memb.

Answer : A

- The glucocorticoid (cortisol) do all of the following , except :

- A) increase glycogen synthesis
- B) spare the glucose
- C) stimulate gluconeogenesis
- D) mobilize fatty acid
- E) anti inflammatory

Answer : A

- which of the following is not related to CAMP function :

Answer : promote cell death

- the precursor for epinephrine hormone is :

Answer : tyrosine

* Community :

- The risk of developing complication among women with GDM comparing them to women without GMD is :

- A) 2 times
- B) 3 times
- C) 5 times
- D) 10 times
- E) 12 times

Answer : D

- which of the following lifestyle modification will not effect the risk of DM :

- A) BMI <25
- B) fat intake <30%
- C) saturated fat intake <20%
- D) fat fiber >15
- E) physical activity > 4 h/week

Answer : C (cause saturated fat should be <10%)

- Collected By : Omar Sawas , if u have any notes pls just pass them to me through Facebook 😊