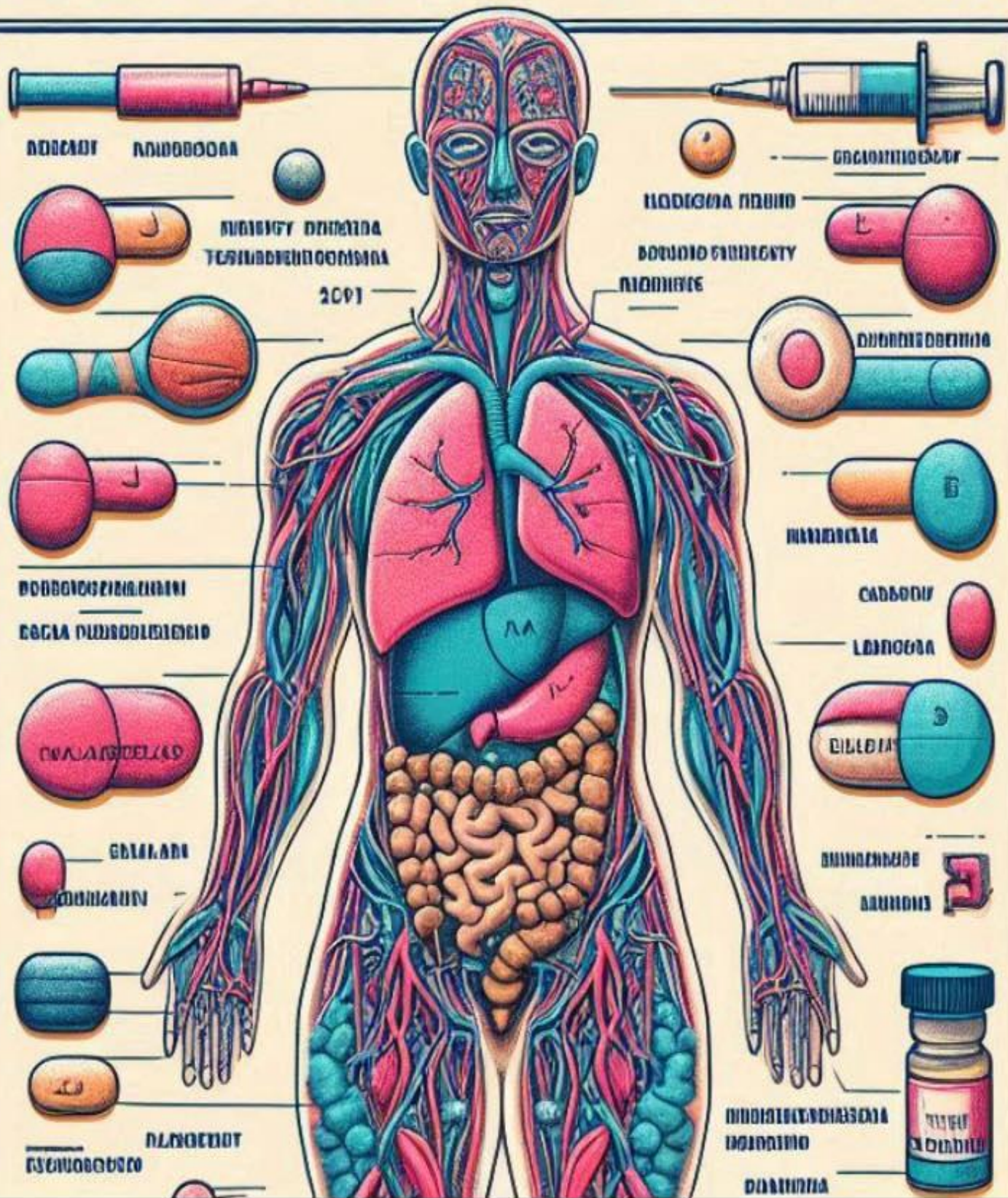




ENDOCRUNIE

PHARMACCLOGY PAST PAPER



Thyroid hormones lect.5

• Which of the following hormones is not a peptide or a protein in nature:

- thyroxin
- GH
- Insulin
- ACTH
- Answer: A

• All of the following are antithyroid drugs, EXCEPT:

- A. Iodide.
- B. Propylthiouracil.
- C. Propranolol.
- D. Radioactive iodide.
- E. Carbimazole.
- Answer: C

• T3 differs from T4 in all of the following, EXCEPT:

- A. Duration of action.
- B. Potency.
- C. Origin.
- D. Protein binding.
- E. Mechanism of action.
- Answer: E

• Regarding the steps involved in Synthesis of thyroid hormones which is false:

- A. T4 and T3 are released into the circulation.
- B. Iodide is taken up at the a basolateral cell membrane.
- C. T4 and T3 are released into the Golgi bodies.
- D. Polypeptide chains of g (thyroglobulin) are synthesized in the rough endoplasmic reticulum.
- E. Newly formed To is transported to the cell surface in small apical vesicles.
- Answer: C

More than 60% of endocrinologist use this in case of hyperthyroidism, and it considered the best treatment in this case:

- Thionamide
- Iodide
- radio active iodine
- Lithium carbonate

Answer: C

- which of the following is Propylthiouracil effect:
- Wolff-chaikoff effect
- inhibition of peroxidase enzyme in addition to decrease peripheral deiodination of T4
- Activate releasing of T4 ,T3
- increase peripheral deiodination

Answer: B

Parathyroid hormones (lect.6)

- Hypoparathyroidism is best treated by administration of:
 - A. Octreotide.
 - B. Cortisone.
 - C. Recombinant human parathyroid hormone.
 - D. Spironolactone.
 - E. Vitamin D.
- Answer: E
- Hyperparathyroidism is best treated by:
 - A. Prednisolone.
 - B. Vitamin D.
 - C. Calcitonin.
 - D. Cinacalcet (calcimimetic drug).
 - E. Surgery.
- Answer: E

- Calcitonin:
- A. Is effective orally.
- B. Is produced in the parathyroid gland.
- C. Is a steroid hormone.
- D. Is used to control hypercalcemia.
- E. Increases the rate of bone turnover.
- Answer: D

- Drug of choice to treat paget's disease:
- Calcitonin
- Vit. D
- PTH
- Answer: A

- Not used in hypocalcemia in case of pseudo hypopituitarism:
- rPTH
- Ca gluconate oral
- Ca gluconate iv
- Ca chloride

Answer: A

- cAMP is used to test:
- thyroid gland
- parathyroid gland
- pancreas

Answer: B

Pancreatic hormones

(lect. 7+8)

• Which of the following is NOT an adverse reaction of insulin:

- A. Insulin resistance.
- B. itching, redness, swelling, anaphylaxis shock.
- C. Hyperglycemia.
- D. Nausea, hungry, tachycardia.
- E. Lipodystrophy.
- Answer: C

• The following is short-acting insulin that could be given S.C and I.V:

- A. Protamine zinc suspension.
- B. Isophane zinc suspension.
- C. Extended insulin zinc suspension.
- D. Insulin zinc suspension.
- E. Regular insulin.
- Answer: E

• The following insulin is widely used in insulin pumps:

- A. Insulin zinc suspension.
- B. Protamine zinc suspension.
- C. Insulin lispro.
- D. Regular insulin.
- E. Isophane zinc suspension.
- Answer: C

• Ketoacidosis is best managed by administration of:

- A. Insulin lispro.
- B. Insulin zinc suspension.
- C. Regular insulin.
- D. Insulin glargine.
- E. Regular insulin + K⁺.
- Answer: E

• Diabetes insipidus is a major side effect to:

- A. Bromocriptine.
- B. Desmopressin.
- C. Growth hormone.
- D. Lithium carbonate.
- E. Dexamethasone.
- Answer: D

• Regarding sulfonylurea oral hypoglycemic agents, choose the wrong statement:

- A. Hypoglycaemia as a side effect to such class of antidiabetic agents is not frequent.
- B. As compared to first generation, second generation sulfonylureas are less potent.
- C. Their actions are mediated by interacting with specific receptors.

• D. They strongly bind plasma albumin (drug-drug interactions are common).

• E. They increase pancreatic insulin release and increase insulin affinity to its peripheral receptors.

• Answer: B

• All the following are the Chronic complications of Diabetes mellitus

EXCEPT:

• A. Strokes.

• B. Coronary heart disease.

• C. Renal failure.

• D. Diabetic ketoacidosis.

• E. Poor wound healing.

• Answer: D

• All the following are the Pharmacological actions of insulin EXCEPT:

• A. Inhibit lipolysis.

• B. Diminish hepatic glycogenolysis.

• C. Inhibit hepatic gluconeogenesis.

• D. Induction of gluconeogenesis.

• E. Promote hepatic glucose storage into glycogen.

• Answer: D

• All the following are mechanisms of action of the sulfonylureas

EXCEPT:

- A. Increase insulin receptor number and the affinity to insulin.
- B. Ameliorating insulin resistance.
- C. Direct stimulation of insulin release from the pancreatic B-cells.
- D. Inhibition of glucagon secretion by pancreas alpha cells.
- E. Induction of glucagon secretion by pancreas.
- Answer: E

• Sitagliptin is an example of:

- A. A synthetic prostaglandin
- B. An inhibitor to incretin metabolism
- C. An ultra short-acting insulin
- D. An antihistamine
- E. A serotonin agonist
- Answer: B

• A 45 year old diabetic female patient who is on 100 units of insulin

daily, was found to have normal blood levels of C-peptide. Normal

levels of C-peptide in her blood indicate that she:

- A. Is taking also an oral hypoglycemic agent.
- B. Has normal pancreatic function.

- C. Has type I diabetes mellitus.
- D. Is taking too much insulin.
- E. Is taking human insulin.
- Answer: B

• All of the following are true statements about the thiazolidinediones

EXCEPT

- A. Thiazolidinediones may be hepatotoxic in some individuals.
- B. Thiazolidinediones increase the number of insulin receptors on the cell membrane surface.
- C. Thiazolidinediones bind a nuclear receptor in tissue termed PPAR- γ .
- D. Thiazolidinediones are a novel class of drugs that were initially identified for their insulin- sensitizing properties.
- E. All of the above.
- Answer: b

• The main problem of metformin is that :

- A. It increases the risk of lactic acidosis.
- B. It increases the risk of ketoacidosis.
- C. It causes development of congestive heart failure.
- D. It causes hypoglycemia.
- E. All of the above.
- Answer: A

• Hypoglycemia rarely seen with these drugs when used as monotherapy EXCEPT:

- A. Metformin.
- B. Acarbose.
- C. Miglitol.
- D. Glyburide.
- E. All of the above.
- Answer: d

• In addition to its effects on stimulating glucose uptake by tissues, insulin has other physiological actions including:

- A. Increase hepatic glycogenolysis.
- B. Decreasing hepatic glucose storage into glycogen.
- C. Promoting hepatic gluconeogenesis.
- D. Inhibit lipolysis.
- E. All of the above.
- Answer: d

• Sulfonylurea receptor in B-cell membrane activation results in:

- A. ATP-sensitive K⁺-channel activation.
- B. Cellular membrane depolarization.
- C. Ca²⁺ removal from the cell via voltage-dependent Ca²⁺ channel.
- D. Glucose release.

- E. All of the above.
- Answer: b

- Treatment of Type 2 Diabetes include:
- A. Agents which decrease insulin secretion.
- B. Agents which decrease the sensitivity of target organs to insulin.
- C. Agents which increase glucose absorption.
- D. Insulin.
- E. All of the above.
- Answer: d

• MEASUREMENT BLOOD LEVEL OF WHICH OF THE FOLLOWING IS USED TO ASSES BETA CELLS FUNCTION IN A DIABETIC PATIENT RECEIVING 100 UNITS OF INSULIN ZINC SUSPENSION?

- C-peptide
- Metformin side effect:
- decrease B12 absorption
- Alkalosis
- constipation

Answer:A

•Which of the following is Mismatched:

- Buformin → increase glycolysis
- sitagliptin → GLP-1 agonist
- Migliol → decrease carbs absorption

Answer: B

Most important side effect off insulin is:

- hypoglycemia
- lipodystrophy
- Allergy

Answer: A

•An example of Peakless insulin:

- Humulin
- insulin glargine
- Ultralente

Answer: B

•What is the MOA of Sulfonylureas:

- decrease no. of B cells
- increase gluconeogenesis
- increases insulin release

Answer: C