

Эндокринология

A 62-year-old patient has DM-2. Diabetes is being compensated by diet and Maninilum. Patient has to undergo an operation for inguinal hernia. What tactics of hypoglycemic therapy should be chosen?

- A. Prescribe the short-acting insulin
- B. Give Glurenorm in place of Maninilum
- C. To continue with the current therapy
- D. Prescribe the long-acting insulin
- E. Prescribe guanylguanidine

A 14-year-old girl has been presenting with irritability and tearfulness for about a year. A year ago she was also found to have diffuse enlargement of the thyroid gland (II grade). This condition was regarded as a pubertal manifestation, the girl didn't undergo any treatment. The girl's irritability gradually gave place to a complete apathy. The girl got puffy face, soft tissues pastosity, bradycardia, constipations. Skin pallor and gland density progressed, the skin got a waxen hue. What disease may be assumed?

- A. Autoimmune thyroiditis
- B. Diffuse toxic goiter
- C. Thyroid carcinoma
- D. Subacute thyroiditis
- E. Juvenile basophilism

A 30-year old woman taken by influenza has empty stomach glycemia at the rate of 11,3 millimole/l, glucosuria at the rate of 25 g/l. The patient is 168 cm tall and weighs 67 kg. What test would be the most informative for the diagnosis specification?

- A. Insulinemia on an empty stomach
- B. Daily glycemia variability
- C. Daily glucosuria variability
- D. Glycemia test an hour after taking meals
- E. Glucose tolerance test

A 52-year-old male patient has an 18 year history of diabetes mellitus. One year ago he had cystitis. The patient takes 0,005 g of maninil thrice a day. Objectively: height - 176 cm, weight - 82 kg. Glycemia variability on an empty stomach is at the rate of 10,3-12,4 millimole/l. Analyses revealed proteinuria at the rate of 0,033 g/l. The most efficient way to prevent diabetic nephropathy progress will be:

- A. To replace maninil with insulin

- B.** To increase maninil dosage
- C.** To decrease daily caloric content
- D.** To supplement the present therapy with insulin
- E.** To administer antibacterial therapy

A 34-year-old female patient complains about weakness, 12 kg weight loss within 6 months, sweating, palpitation, irritability. Objectively: III grade thyroid gland is elastic, diffuse enlargement is present, there is also a node in the right lobe. Cervical lymph nodes are not enlarged. What treatment tactics would be the most rational?

- A.** Operation after antithyroid therapy
- B.** Radioactive iodine administration
- C.** Immediate surgical intervention
- D.** Conservative antithyroid therapy
- E.** Immediate gamma-ray teletherapy

A 10-year-old girl consulted a doctor about thirst, frequent urination, weight loss. She has been observing these symptoms for about a month. Objectively: no pathology of internal organs was revealed. What laboratory analysis should be carried out in the first place?

- A.** Blood glucose analysis on an empty stomach
- B.** Glucose in urine test on the base of daily diuresis
- C.** Acetone in urine test
- D.** Glucose tolerance test
- E.** Glucosuric profile

A 26-year-old patient complains about considerable muscle weakness, dizziness, extended abdominal pain, nausea and vomiting giving no relief. The disease has been gradually developing within 6 months. There was progress of general

weakness, skin darkening. The patient fell into grave condition after an ARD: there appeared abdominal pain and frequent vomiting. Objectively: the skin is dry with diffuse pigmentation. Heart sounds are significantly weakened, heart rate - 60/min, AP- 80/40 mm Hg. The abdomen is slightly painful in the epigastric region. In blood: WBCs - $8,1 \cdot 10^9/l$, glucose - 3,0 millimole/l. What is the most likely diagnosis?

- A.** Chronic adrenal insufficiency. Addisonian crisis
- B.** Acute pancreatitis
- C.** Toxic infectious shock
- D.** Acute food poisoning
- E.** Acute cholecystitis

A 3-year-old child has been diagnosed with type I diabetes mellitus,

hyperosmolar coma. The laboratory confirmed the diagnosis. Which laboratory findings are characteristic for such condition?

- A.** High hyperglycemia without ketonemia
- B.** Hyperglycemia and ketonemia
- C.** Hyperglycemia and glucosuria
- D.** Hyperglycemia and ketonuria
- E.** Hyperglycemia and high indicators of acid-base balance

A 14-year-old girl has been presenting with irritability and tearfulness for about a year. A year ago she was also found to have diffuse enlargement of the thyroid gland (II grade). This condition was regarded as a pubertal manifestation, the girl didn't undergo any treatment. The girl's irritability gradually gave place to a complete apathy. The girl got puffy face, soft tissues pastosity, bradycardia, constipations. Skin pallor and gland density progressed, the skin became of a waxy hue. What disease may be suspected?

- F.** Autoimmune thyroiditis
- G.** Diffuse toxic goiter
- H.** Thyroid carcinoma
- I.** Subacute thyroiditis
- J.** Juvenile basophilism

A 47-year-old woman underwent a thyroid gland resection on account of nodular euthyroid goiter. What preparations are most likely to prevent the disease recurrence?

- A.** Thyroid hormones
- B.** Mercazolil
- C.** Thyrotropin
- D.** Antistruminum (potassium iodide)
- E.** Radioactive iodine

A 39-year-old patient complains of a tumour on the anterior surface of her neck. The tumour has been observed for 2 years. It is nonmobile and has enlarged recently. The patient has a changed tone of voice, a sense of pressure. Objectively: in the left lobe of the thyroid gland a 3 cm node is palpable; it is very dense, tuberous, painless. Cervical lymph nodes are enlarged. Functional status of the thyroid gland is unchanged. What is the most likely diagnosis?

- A.** Thyroid gland cancer
- B.** Nodular euthyroid goiter
- C.** Nodular hyperthyroid goiter
- D.** Chronic lymphomatous Hashimoto's thyroiditis
- E.** Chronic fibrous Riedel's thyroiditis

For the persons who live in a hot area after an accident at a nuclear object, the

greatest risk within the first decade is represented by cancer of:

- A. Thyroid gland**
- B. Skin**
- C. Reproduction system organs**
- D. Breast**
- E. Lungs**

A 54 y.o patient complains a weakness, weight despite loss, the unchanged appetite, frequent urination, skin itch for six months. Some time ago the patient underwent treatment for furunculosis. She hasn't been examined recently. Objectively: malnutrition, dry skin with signs of scratching. Small lymph nodes can be palpated in the axillary regions. Changes in the internal organs are absent. What testing must be administered in the first place?

- A. Blood sugar test on an empty stomach**
- B. Complete blood count**
- C. Endoscopy of stomach**
- D. Lymph node biopsy**
- E. Blood sterility testing**

A 10-year-old girl consulted a doctor about thirst, frequent urination, weight loss. She has been observing these symptoms for about a month. Objectively: no pathology of internal organs was revealed. What laboratory analysis should be carried out in the first place?

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- B. Glucose in urine test on the base of daily diuresis**
- C. Acetone in urine test**
- D. Glucose tolerance test**
- E. Glucosuric profile**

A 29-year-old patient complains of absent menstruation for a year, milk discharge from the nipples when pressed, loss of lateral visual fields. X-ray shows an expansion of the sella turcica. What is the most likely cause of this condition?

- A. Pituitary tumour**
- B. Mammary tumour**
- C. Functional disorder of the hypothalamic-pituitary-ovarian system**
- D. Ovarian tumor**
- E. Pregnancy**

A 48-year-old patient was found to have diffuse enlargement of the thyroid gland, exophthalmia, weight loss of 4 kg in 2 months, sweating. Objectively: HR-105/min, BP- 140/70 mm Hg. Defecation act is normal. What kind of therapy is recommended in this case?

- A. Mercazolil
- B. Radioiodine
- C. Propranolol
- D. Lugol's solution
- E. Thyroxine

A 32-year-old female complains of dizziness, headache, palpitation, tremor. For the last several months she has been under outpatient observation for the increased arterial pressure. Since recently such attacks have become more frequent and severe. Objectively: skin is covered with clammy sweat, tremor of the extremities is present. HR- 110/min, AP- 220/140 mm Hg. Heart sounds are muffled. Blood test results: WBCs - $9,8 \cdot 10^9/l$, ESR - 22 mm/h. Blood glucose - 9,8 millimole/l. What disease is the most likely cause of this crisis?

- A. Pheochromocytoma
- B. Essential hypertension
- C. Preeclampsia
- D. Primary hyperaldosteronism
- E. Diabetic glomerulosclerosis

A 40-year-old female patient complains of headache, dizziness, muscle weakness, occasional cramps in the extremities. She has been taking antihypertensive medications for 10 years. BP- 180/100 mm Hg. Blood potassium - 1,8 millimole/l, sodium - 4,8 millimole/l. In urine: alkaline reaction, the relative density - 1012, protein and sugar are not found, WBCs - 3-4 in the field of vision, RBCs - 1- 2 in the field of vision. Conn's syndrome is suspected. Which drug should be chosen for the treatment of arterial hypertension?

- A. Spironolactone
- B. Propanolol
- C. Enalapril
- D. Hydrochlorothiazide
- E. Clonidine

On the first day after a surgery for diffuse toxic goiter a patient developed difficulty breathing, cold sweats, weakness. Objectively: pale skin, body temperature - 38, 5°C, RR - 25/min, Ps- 110/min, AP- 90/60 mm Hg. What early postoperative complication occurred in the patient?

- A. Thyrotoxic crisis
- B. Hypothyroid crisis
- C. Postoperative tetany
- D. Acute thyroiditis
- E. Compression of the trachea by the hematoma

A 45-year-old female patient complaining of general weakness, nausea and vomiting has been delivered to a hospital by the ambulance. Recently there has been a lack of appetite, weight loss. Objectively: hyperpigmentation of skin, blood

pressure at the rate of 70/45mmHg, bradycardia. Additional studies revealed the reduced concentration of aldosterone and cortisol in blood, decreased excretion of 17-ketosteroids and 17-oxyketosteroids in the urine, hyponatremia, chloropenia, hypokalemia. What therapeutic measures are required?

- A.** To administer glucocorticoids, mineralocorticoids, and a diet with a high content of cooking salt
- B.** To prescribe a diet with a high content of cooking salt
- C.** To administer prednisolone
- D.** To administer aldosterone
- E.** To administer insulin

A 35-year-old female patient has gained 20 kg weight within a year with the normal diet. She complains of chill, sleepiness, shortness of breath. The patient's mother and sister are corpulent. Objectively: height - 160 cm, weight - 92 kg, BMI - 35,9. Obesity is uniform, there are no striae. The face is amimic. The skin is dry. The tongue is thickened. Heart sounds are muffled. HR- 56/min, BP- 140/100 mm Hg. The patient has constipations, amenorrhea for 5 months. TSH- 28 mkME/l (normal rate - 0,32-5). Craniogram shows no pathology. What is the etiology of obesity?

- A.** Hypothyroid
- B.** Hypo-ovarian
- C.** Hypothalamic-pituitary
- D.** Alimentary and constitutive
- E.** Hypercorticoid

A 40-year-old female patient complains of having a bulge on the anterior surface of neck for 5 years. Objectively: Ps- 72 bpm, arterial pressure - 110/70 mm Hg, in the right lobe of thyroid gland palpation reveals a mobile 4x2 cm node, the left lobe is not palpable, the basal metabolic rate is 6%. What is the most likely diagnosis?

- A.** Nodular euthyroid goiter
- B.** Nodular hyperthyroid goiter
- C.** Riedel's thyroiditis
- D.** Mixed euthyroid goiter
- E.** The median cervical cyst

A 39-year-old female patient complains of dyspnea when walking, palpitation, edemata in the evening. The patient's height is 164 cm, weight - 104 kg. Objectively: overnutrition. Heart sounds are weak, and tachycardia is present. The menstrual cycle is not broken.

Blood sugar is 5,6 mmol/l, ACTH-response tests revealed no alterations. X-ray of the turkish saddle revealed no pathology. What disease is it?

- A.** Alimentary obesity
- B.** Climax
- C.** Pituitary obesity

- D. Diabetes mellitus**
- E. Cushing's syndrome (primary hypercortisolism)**

A 39-year-old female patient complains of rapid fatigability, drowsiness, dry skin, hair loss, swelling of the face. A month ago, she underwent a surgery for thyrotoxicosis. The patient has the following gland dysfunction:

- A. Thyroid (hypothyroidism), due to inadequate operative technique**
- B. Pituitary, due to a tumor**
- C. Adrenal**
- D. Parathyroid, due to the gland removal during surgery**
- E. Ovarian, due to a tumor**

A 24-year-old male patient had been diagnosed with class III diffuse toxic goiter. There is moderate hyperthyroidism. A surgery was suggested, and the patient agreed to it. What preoperative measures should be taken for prevention of thyrotoxic crisis in the postoperative period?

- A. Administration of antithyroid drugs**
- B. Minimally invasive surgical techniques**
- C. Bed rest**
- D. Detoxification therapy**
- E. Administration of corticosteroids**

A patient with autoimmune thyroiditis accompanied by multinodular goiter underwent the right lobe ectomy and subtotal resection of the left lobe. What drug should be administered to prevent postoperative hypothyroidism?

- A. L-thyroxine**
- B. Merkazolil**
- C. Iodomarin**
- D. Lithium drugs**
- E. Insulin**

A 49-year-old female patient has type 1 diabetes of moderate severity. The disease is complicated by retinopathy and polyneuropathy. Besides that, repeated analyses of the daily urinary excretion of albumin revealed microalbuminuria (200- 300 mg/day). Glomerular filtration rate is 105 ml/min. Blood pressure is within normal range. Normalization of the following indicator should be the first-priority task in the secondary prevention of diabetic nephropathy:

- A. Glycosylated hemoglobin**
- B. C-peptide**
- C. Blood insulin**
- D. Fasting glucose**
- E. Glycemia 2 hours after a meal**

After having the flu, a 39-year-old male patient with a history of Addison's disease developed a condition manifested by weakness, depression, nausea, vomiting, diarrhea, hypoglycemia. AP- 75/50 mm Hg. Blood test results: low corticosterone

and cortisol, 13-oxycorticosteroids, 17-oxycorticosteroids levels. What condition developed in the patient?

- A. Acute adrenal insufficiency
- B. Acute gastritis
- C. Acute enterocolitis
- D. Collapse
- E. Diabetes mellitus

After a holiday in the Crimea, a 49-year-old male patient with a history of lung tuberculosis felt increased weakness, periodic dizziness, easing bowel movements with abdominal pain, the need for additional salting his meals. The patient has noted that his condition improves after some sweet tea and validol taken sublingually. Objectively: there is an intense darkening of skin, AP- 70/50 mm Hg, glycemia is 3,0 mmol/l. What is the possible cause of health deterioration:

- A. Chronic adrenal insufficiency
- B. Diabetes mellitus
- C. Coronary artery disease
- D. Chronic pancreatitis
- E. Pulmonary tuberculosis

18. Male 30 y.o., noted growing fingers and facial skull, changed face. Complains of poor eyesight, weakness, skin darkening, loss of body weight. X-ray shows broadening of sella turcica, thinning of tuberculin sphenoidale, signs of increased intracranial pressure. What diagnosis can you make?

- A. Adenoma of hypophysis
- B. Encephalitis of truncus
- C. Optico - chiasmatic arachnoiditis
- D. Adrenal gland tumor
- E. Tumor of pondo-cerebellar corner

25. A 62 y.o. patient with DM-2. Diabetes is being compensated by diet and Maninilum. Patient has to undergo an operation for inguinal hernia. What the tactics of hypoglycemic therapy should be used?

- A. Prescribe fast-acting insulin
- B. Give Glurenorm in place of Maninilum
- C. Continue with the current therapy
- D. Prescribe long-acting insulin
- E. Prescribe guanil guanidines

26. A 32 y.o. patient complains of severe weakness, tremor of extremities. On physical examination, there is loss of body weight, wet and warm skin. The thyroid gland is enlarged up to the 3rd degree, painless, elastic. Ps- 108 bpm. BP- 160/55 mm Hg. The rest is in norm. What can be diagnosed?

- A. Diffuse toxic goitre of the 3rd degree, thyrotoxicosis of the average degree
- B. Diffuse euthyroid goitre of the 3rd degree
- C. Chronic autoimmune thyroiditis, hypertrophic type
- D. Chronic fibrous thyroiditis
- E. Toxiferous adenoma of the thyroid gland

28. A 38 y.o. patient was urgently admitted to the hospital with complaints of sudden weakness, dizziness, loss of consciousness, body weight loss, nausea, vomiting, severe pain in epigastric area, diarrhea, skin hyperpigmentation. What is

the most probable diagnosis?

- A. Addisonic crisis
- B. Acute gastroenteritis
- C. Meningoencephalitis
- D. Scleroderma
- E. Pellagra

29. An unconscious patient presents with moist skin, shallow breathing. There are signs of previous injection on the shoulders and hips. BP- 110/70 mm Hg. Tonus of skeletal muscles and reflexes are increased. Cramps of muscles of the extremities are seen. What is the most likely disorder?

- A. Hypoglycemic coma
- B. Hyperglycemic coma
- C. Hyperosmolar coma
- D. Hyperlactacidotic coma
- E. Stroke

89. A 12 y.o. child with acute glomerulonephritis presented with hypertensive syndrome during first days of the disease. What is the role of angiotensin II in the pathogenesis?

- A. Intensifies production and secretion of aldosterone
- B. Increases heart output
- C. Inhibits depressive action of prostaglandins
- D. Increases erythropoietin production
- E. Increases renin level

96. A 26 y.o. male patient with postoperative hypothyroidism takes thyroxine 100mg 2 times a day. He has developed tachycardia, sweating, irritability, sleep disorder. Determine further treatment tactics.

- A. To decrease thyroxine dosage
- B. To increase thyroxine dosage
- C. To administer beta-blockers
- D. To add mercaptopurine to the treatment
- E. To administer sedatives

149. A 40 y.o. child has hyperosthesia, CNS depression, dyspepsia. Sepsis is suspected. What should the differential diagnosis be made with?

- A. Hypoglycemia
- B. Hypocalcemia
- C. Hyperbilirubinemia
- D. Hyperkalemia
- E. Hypomagnesemia

167. A 49 y.o. female patient presents with acute attacks of headache associated with pulsation in temples, increasing AP to 280/140 mm Hg. Pheochromocytoma is suspected. What is the mechanism of hypertensive crisis in this patient?

- A. Increasing of catecholamines concentration
- B. Increasing of aldosterone level in blood
- C. Increasing of plasma renin activity
- D. Increasing of vasopressin excretion
- E. Increasing of thyroxine excretion

27. A 40 y.o. patient was diagnosed: 1. Medular thyroid gland cancer.

2. Pheochromocytoma. What operation should be performed at first?

- A. Operation on account of pheochromocytoma
- B. Operation on thyroid gland
- C. Krail's operation
- D. Subtotal resection of thyroid gland and fascicular resection of lymphatic nodes
- E. Vanach's operation

39. A 33 y.o. woman has been suffering from DM (diabetes mellitus) for 5 years.

For the last 3 years she has been taking more than 100 units of insulin per day.

Body weight has increased up to 10kg. Fasting blood glucose is 13 mmol/L, glucoseuria - 3%. Generalized microangiopathy. By increasing the dose of insulin the parameters of glycemia do not change. The diagnosis is:

- A. DM 1st type, severe form, decompensation, insulin resistant
- B. DM 2nd type, severe form, decompensation
- C. DM 1st type, severe form, subcompensation, Somoji phenomenon
- D. DM 2nd type, moderate form, Zabrodi phenomenon
- E. DM 1st type, severe form, decompensation, allergic reaction to insulin

22. Generalized low voltage on an ECG (QRS deflection < 5 mm in limb leads and < 10 mm in precordial leads) may be a marker for all of the following disorders EXCEPT:

- A. Hyperthyroidism
- B. Pericardial effusion
- C. Cardiac transplant rejection
- D. Amyloidosis
- E. Coronary artery disease

39. A 34 year old woman in the 10th week of gestation (the second pregnancy) consulted a doctor of antenatal clinic in order to be registered there. In the previous pregnancy hydramnion was observed, the child's birth weight was 4086 g. What examination method should be applied in the first place?

- A. The test for tolerance to glucose
- B. Determination of the contents of fetoprotein
- C. Bacteriological examination of discharges from vagina
- D. A cardiophonography of fetus
- E. US of fetus

93. A 50 year old woman with a 2-year history of mild, diffuse, tender thyroid enlargement complains of 10 pound weight gain and fatigue. What is the most probable diagnosis?

- A. Hashimoto's thyroiditis
- B. Riedel's thyroiditis
- C. Subacute thyroiditis

- D. Suppurative thyroiditis
- E. Papillary thyroid carcinoma

174. During examination a patient is unconscious, his skin is dry and hot, face hyperemia is present. The patient has Kussmaul's respiration, there is also smell of acetone in the air. Symptoms of peritoneum irritation are positive. Blood sugar is at the rate of 33 millimole/l. What emergency actions should be taken?

- A. Intravenous infusion of short-acting insulin
- B. Intravenous infusion of glucose along with insulin
- C. Introduction of long-acting insulin
- D. Intravenous infusion of neohaemodesum along with glutamic acid
- E. Intravenous infusion of sodium chloride saline

20. A 23 y.o. woman who suffers from insulin-dependent diabetes was admitted to the acute care department with mental confusion, inadequate anxious behaviour, hyperhidrosis, excessive salivation, tachycardia. What examination will be a primary task?

- A. Blood test for sugar
- B. Clinical blood analysis
- C. Plasma electrolytes test
- D. Gaseous composition of arterial blood
- E. Blood urea and creatinine test

128. A 63 y.o. patient was operated on account of big multinodular euthyroid goiter. Despite of technical difficulties a forced subtotal resection of both parts of the thyroid gland was performed. On the 4-th day after the operation the woman had cramps of face muscles and upper extremities, stomach ache. Positive Chvostek's and Trousseau's signs. What is the most probable cause of such condition?

- A. Insufficiency of parathyroid glands
- B. Postoperative hypothyroidism
- C. Thyrotoxic crisis
- D. Injury of recurrent nerve
- E. Tracheomalacia

188. A 9 year old boy had acute respiratory viral infection. After it there appeared polydipsia, polyuria, weakness, nausea. Examination revealed the following symptoms: mental confusion, dry skin, soft eyeballs, Kussmaul's respiration, acetone smell from the mouth, muffled heart sounds, soft and painless abdomen. Blood sugar was 19 millimole/l. What acute condition is it?

- A. Ketoacidotic coma
- B. Hyperosmolar coma
- C. Cerebral coma
- D. Hepatic coma
- E. Acute renal insufficiency

200. A female patient consulted a doctor about gain in weight, chill, edemata, dry skin, sleepiness, problems with concentration. Objectively: the patient's height is 165 cm, weight is 90 kg, gynoid body proportions, $t = 35,8^{\circ}\text{C}$, ESR-58/min, AP-105/60 mm Hg. Heart sounds are weakened, bradycardia is present. Other internal organs have no changes. Thyroid gland is not palpable. Mammary glands ooze

milk droplets. Hormonal study revealed rise of TSH and prolactin concentration, reduction of T4. What factor caused obesity?

- A. Primary hypothyroidism
- B. Secondary hypothyroidism
- C. Prolactinoma
- D. Hypopituitarism
- E. Adiposogenital dystrophy