## **Tests KROK2 Endocrinology**

A 33-year old patient with first found diabetes mellitus with the help of a diet supports glycemia after meals less than 10,0 mmol/l. He refrains from insulinotherapy. What investigation is the most important to conduct for the differentiation of the 1<sup>st</sup> and 2<sup>nd</sup> types of diabetes?

- A. \* Defining antibodies to the islet cells
- B. Glucose-tolerant test.
- C. Research of glycemia on an empty stomach
- D. Determination of HbAc1
- E. Determination of fructosamine of blood

A 26 –year old person complains of thirst, poliuria, general weakness, loos of body weight. The objective picture shows: the skin is dry, red cheeks, vesicular respiration. The heart tones are sound. The of heart soundings. The tongue is dry. There are no symptoms of irritation of the peritoneum. What investigation is the most informative?

- A. \*Diagnosing blood on sugar
- B. General blood analysis
- C. General urine analysis
- D. Urine analysis by Zimnitskiy
- E. Blood analisis on liver function tests

A 46-year old patient has been treated from hypertensive illness for 5 years. Father is ill with diabetes mellitus. The objective picture shows: height is 170 cm. Weight is 96 kg. The pulse is 72/min, BP is 190/110. Liver +3 sm. There is edema of shins. Sugar of blood on an empty stomach is 5,4 mmol/l. What methods of the primary prophylaxis of diabetes mellitus does the patient need?

- A. \* To get rid of excess weight.
- B. To normalize arterial pressure
- C. To appoint biguanides.
- D. To appoint hepatoprotektors.
- E. To appoint diuretics.

A 35 –year old person was operated concerning ulcerous illness of stomach. The deficit of body weight is 10 kg. After the operation the level of glucose in the whole capillary blood on an empty stomach is 6,7 mmol/l. During the second examination - 11,1 mmol/l (after meals), the level of glicolyzed hemoglobinis 10%. Give interpretation of these results:

- A. \* Diabetes mellitus
- B. Disturbance of the tolerance to glucose
- C. Risk group on diabetes mellitus
- D. Normal
- E. Post-operation hypoinsulinemia

A 46-year old patient has been treated from hypertensive illness durung 5 years. There are complaints of periodical headache, short of breath while. The physical load. Father is ill with diabetes mellitus. The objective picture shows: height is 170 cm. Weight is 96 kg. The pulse is 72, BP is 190/110. The left heart border is displaced on 1 cm to the left. The heart tones are weakened, the accent of the 2<sup>nd</sup> tone is above the aorta. Liver +3cm. What metods of the primary prophylaxis of DM are appropriate for this patient?

- A. To get rid of excess weight
- B. To normalize arterial pressure
- C. To appoint biguanids

- D. To appoint hepatoprotectors
- E. To appoint selective beta-adrenoblokator antagonists

How to estimate the test of tolerance to glucose for a 16-years-old boy on an empty stomach - 5,78 mmol/l, in 1 hour after the intake of 75 grammes of glucose - 7,21mmol/l, in 2 hours - 5,68 mmol/l?

- A. Tolerance to glucose is not disturted.
- B. Diabetes mellitus of moderate form.
- C. Diabetes mellitus of latent form. D. Diabetes mellitus of mild form.
- E. Symptomatic hyperglycemia.
- A 54-year old patient complaints of weakness, loss of body mass on the background of a good appetite, frequent urination, of skin itch during half a year. She was treated once from furunculosis. She was not examined. The objective picture shows: decreased weight, the skin is dry, tracks of scratches. Small lymphnodes palpation in a axillary region. Thereave no intestinal shins. What investigation must be appointed first of all?
- A. Glucose of blood on an empty stomach
- B. General analysis of blood
- C. Endoscopic research of stomach
- D. Biopsy of lymph node
- E. Inoculation of sterility

For the first time a 18 year- old 5 grammes/l of glucose was found in the urine. Glycemia on an empty stomach - 5,1 mmol/l. There are not complaints. Which of the investigation exclude diabetes mellitus most reliably?

- A. The test of tolerance to glucose
- B. Daily oscillations of glycemia
- C. The level of insulin in plasma
- D. Daily glucosuria
- E. Glycemia after-meals

For a woman 30 years of, which was ill with flu, glycemia on an empty stomach - 11,3 mmol/l, glucosuria is 25 grammes/l. Height is 168 cm. Weight is 67 kg. What investigation is themost informative for defining the diagnosis?

- A. Insulinemia on an empty stomach
- B. Daily all oscillations of glycemia
- C. Daily variations of glucosuria
- D. Glycemia in 1 hour aftermeals
- E. The test of tolerance to glucose

A 40 –year old person was ill a acute bronchitis. Height is 178 cm. Weight is 92 kg. Glycemia on an empty stomach - 13, 2 mmol/l. He doesn't know any patients with diabetes mellitus in the family. Which of the following factors in considered to be the most probable etiology of diabetes mellitus at this patient?

- A. Heredity
- B. Infection
- C. Hypodynamia
- D. Age
- E. Obesity

A 30 –year old person applied with the complaints of dryness in the commouth, thirst, poliuria, loss of weight, weakness. Objectively: glycemia on an empty stomach is 14, 6 mmol/l, a glucosuria is 35 grammes/l. What data of the anamnesis will allow to define the type of diabetes mellitus most probably?

- A. Speed of increasing of symptoms
- B. Character nutrition
- C. Heredity on diabetes mellitus
- D. Infectious diseases are in the anamnesis
- E. Unfavorable conditions work

On a reception to the gynaecologist the woman of 62 appealed with complaints off an itch in the vulva. She suffers from a chronic pancreatitis for 8 years. Increased of body weight is 102 kg, height is 158 cm. Inguinal lymphnodes are palpated to 0,8 sm. On the skin of the vulva tracks of scratches. Are present of blood sugar is 7,8 mmmol/l. Shoul'd what disease be thought of?

- A. Diabetes mellitus
- B. Obesity of alimentary genesis
- C. Vulvitis
- D. Limfogranulomatosis
- E. Allergic dermatitis

A 52 –year old person came to the endocrinologist for a regular profilactic medical examination. There are no complaints. 5 years ago diabetes mellitus was found. With the purpose of correction of carbohydrate metabolism dietotherapy and phytotherapy are used. Objective status: the body temperature is 36,7, BP 140/85, pulse 72, respiration 18. The indices of glycemia on an empty stomach do not exceed 5,9 mmol/l; in urine - aglucosuria. Which of she following methods is the informative for the estimation of compensation of diabetes mellitus?

- A. \* Determination of glycosal haemoglobin
- B. Determination of glucosuric
- C. Determination of glycemic type
- D. Determination of tolerance to the carbohydrates
- E. Determination of level of glucose on an empty stomach

A 50 –year old person was delivered to the department with the shortness of breath in rest, which developed acutely. For a week anaprilin and hipotiazid were taken oneself in connection with the increase of BP. There are no other from the patient's words. During she examine were found out ECG- and fermentative signs of she heart attack of myocardial infarction. Glycemia 10 mmol/l; glycosal gemoglobin 12% (norm 4-6); on the fundus of the eyean eye single punctuate hemorrhages. The reason of the hyperglycaemia at a patient is:

- A. \*Diabetes mellitus
- B. Cardiac insufficiency
- C. Myocardial infarction
- D. Reception of thiazide diuretic
- E. Intake of is a beta-blokators antagonists

A 40 –year old ratient was conducted test of tolerance to glucose: on an empty stomach glucose of capillary blood - 5,9 mmol/l, in 2 hours - 8,9 mmol/l. Estimate the results of the test

- A. \*Disturbance tolerance to glucose.
- B. Normal test.
- C. Disturbance of glycemia on an empty stomach
- D. Doubtful test.

### E. Obvious diabetes mellitus

The patients is 46 years. Saffers diabetes mellitus for 9 years, gets of Monotard 26 units insulin in the morning and 18 units in the evening. She complaints of a weakness, languor in the morning after sleep, headache, swetness at night. Objectively: pulse 72, BP is 125/70 mm of gr. Borders of heart are in a norm. Liver +4sm. Sugar in blood: 8.00 - 14 mmol/l; 12.00 - 9 mmol/l; 17.00 - 11 mmol/l. Sugar in urine is within the limits of 0,5-1%. What are she complaints which most probably?

- A. Surplus of insulin dose in the evening
- B. Insufficient evening
- C. Presence of hepatosis
- D. Climacteric syndrome
- E. Insufficiency of dose of insulin in the morning

A 27 year-old sick with the satisfactorily compensated diabetes mellitus type 1has frequent glucopenias, nausea, intestinal disorders, appeared with, hyperpigmentation, diminished BP to 80/50, anaemia grows, Hb - 105 grammes/l. What can the decrease of BP conditioned by?

- A. By chronic insufficiency of adrenal glands
- B. By diabetic gastropathy
- C. Diabetic enteropathy
- D. By making progress anaemia
- E. Diabetes insipidus

Patient 16 year-old suffers from diabetes mellitus type 1 moderate severity since he was 6. There are no complications of diabetes. Gets in the morning 6 U of "Aktropid" and 20 U of "Monotard", in the evening - 4 U "Aktropid" and 12 U "Monotard". Objectively: height is 179 cm, weight is 80 kg. Glycemic type on an empty stomach - 7,6 mmol/l, 13.00 - 8,6 mmol/l, 18.30 - 9 mmol/l, 22.00 - 7,2 mmol/l. Diuresis - 1,7 l. Glucosuria is 5 grammes/l, portion - 300 ml, to a 0,5% sugar. What is the tactics of the further treatment?

- A. To remain the dose of preparations unchangied
- B. To increase the dose of "Monotard" in the morning
- C. To increase the dose of "Monotard" in the evening
- D. To increase a dose in the morning and to evening of "Aktropid" insulin
- E. Additionally to introduce short insulin in the afternoon

Patient ntroduces insulin in the lateral surfaces of shoulders, stomach and thighs. He feels comfortable while at introduction of preparation to the stomach. What can it conditioned by?

- A. By speed of absorption
- B. By the comfort of introduction of insulin in the stomach
- C. Less number nervous receptors
- D. Auto-suggestion
- E. By availability of introduction of injections

A 35 year-old persons suffers from IDDM, chronic cholecystitis. He gets Lente insulin 20 units in the morning, 12 units in the evening. After-meals he started to feel pain in the fight hypochondrium, nausea, vomiting, drowse, poliuriya increased. What before-doctor help will prevent the development of the critical condition during the nearest hours most reliably?

- A. The change of the regimen of insulinoterapii
- B. The use of anaesthetics
- C. The use of cholagogues
- D. The exclusion of fats from the food

## E. The decrease of carbohydrates in the food

A 52-year old woman with DM gets insulin of short and prolonged action before breakfast and supper. Every day before supper she feels pain behind the sternum of a compressive character, with the irradiation in the left hand, tiredness, hyperhidrosis. The height is 168 cm. The weight is 76 kg/os. To prevent the development of the above mentioned symptomsmast probably with the help of:

- A. The change of insulin dose
- B. The use of nitrates
- C. The use of calcium channel blocking agents
- D. The use of beta-adrenoceptor antagonists
- E. The change of food the calorage

A 16 year old young girl had poliuriya, polydipsia for 2th months. She lost 8 kg while having a good appetite. There were some complaints of the pain in the stomach and nausea. In connection with the complaints she was under the emergency hospitalization, glycemia 18 mmol/l, glucosuria 24 grammes/l were found. On a background of the appointment of insulin and infusions of isotonic solutions of NaCl and glucose the complaints including thirst, disappeared. What is most probable diagnosis?

- A. DM type 1
- B. DM type 2
- C. Kidney glucosuria
- D. Diabetes insipidus
- E. Secondary (symptomatic) DM

A 24 year old patient suffers from DM type 1. He is treated with the help of insulins of the prolonged action. The variations of the glucose level during 24 hours are from 15,2 mmol/l up to 22,0 mmol/l, on an empty stomach is 28,6 mmol/l. What is Your tactics of treatment?

- A. \* Insulin of short action
- B. Biguanides
- C. Insulin is prolonged
- D. Diet
- E. Preparations of sulfoniiurea

A 13 years old patient was ill akute: thirst, poliuria, weakness, appeared, he had weight loss of 4 kg for 2 weaks. The objective picture shows: the general condition is satisfactory, there is no smell of acetone. The glucose Level in the blood on an empty stomach is 32 mmol/l, in the urine 6%, acetone

- +. What is your tactics?
- A. \* Insulin of short action
- B. Insulini is prolonged
- C. Biguanides
- D. Diet
- E. Preparations of sulfoniiurea

A 17 years old boy in connection with DM gets insulin: before breakfast and supper - short and prolonged action, before dinner - short. The sleep is uneasy, in the morning hi feels sickliness, headache. Glycemia: 8-00 - 10,1 mmol/l, 12-00 - 6,6 mmol/l, 17-00 - 4,3 mmol/l, 21-00 - 3,7 mmol/l. In the morning portion of urine acetone +. What is the appearance of acetonuria connected with?

- A. \* With the overdose of insulin of the prolonged action before supper
- B. With the underdose of insulin of the prolonged action before supper
- C. With the underdose of insulin of the prolonged action before breakfast

- D. With the surplus dose of insulin of short action before supper
- E. With daily underdose of insulin of the prolonged action

The patient with the DM type 1 gets insulin of "Protafan" in the dose of 32 units before breakfast and 16units before supper. Last glycemic type is: 8.00 - 7,5 mmol/l; 13.00 - 12,0 mmol/l; 18.00 - 14,2; 21.00 - 16,0; 3.00 - 9,0 mmol/l. Your actions on the prophylaxis of the subsequent decompensation of the carbohydrate metabolism.

- A. \* To change the dose of insulin of "Protafan" in the morning into 36 U, and in the evening into 20 U
- B. To decrease the amount of carbohydrates for evening
- C. To transmit a patient to another insulin
- D. To deacriase the amount of carbohydrates during dinner
- E. To change the dose of insulin of "Protafan" in the morning into 30 U, and in the evening into 12 U

The patient with DM type 1 in the state of compensation in connection with the violations of the cardiac rhythm was appointed anaprilin in the dose of 60 mg/day. From the third day of intake of anaprilin the periodical shaking of hands, swetness, dizziness began to appear. What can the patient's condition connected with?

- A. with glucopenias
- B. with the proarhythmogenous action of anaprilin
- C. with an allergy to anaprilin
- D. with hyperglycaemias
- E. with contradrenergic influences of anaprilin

A 33-year old, is ill with DM for 5 years. For the last 3 years she gets more than 100 U of insulin for 24 hours. The body weight increased on 10 kg. Sugar of blood on an empty stomach is 13 mmol/l, in dayly urine is 3%. There is generalized microangiopathy. While the indices of dose of insulin the indexes of glycemia do not change substantially. What complication can be suspected?

- A. \* Decompensation, insulinoresistance
- B. Decompensation
- C. Somodzhi's phenomenon
- D. Zubrode 's phenomenon
- E. An allergic reaction to insulin

A 22-year old patient after the carried flu DM was found for the first time. Glycemia on an empty stomach is 15,2 mmol/l, glucosuria is 2,5 grammes/l, HbAc1is 10%. What treatment should be appointed?

- A. Insulinotherapy
- B. Akarboz
- C. Biguanides
- D. Sulfanamides of the 1 generation
- E. Sulfanamides of the 2 generation

A 56 year old patient is ill with DM type 2. The Illness is compensated by the diet and glyurenorm.

A patient expects an operation concerning. What is the tactics of therapy?

- A. \*Not to change therapy.
- B. To cancel glyurenorm.
- C. To appoint monocomponent insulin.
- D. To appoint recombinant insulin.

## E. To appoint maninil.

A 53 year old woman started to feel the itch of skin after a psychic trauma. The height is 167cm. Weight is 89kg. Glycemia on an empty stomach is 8,1 mmol/l. What diagnosis is the most reliable?

- A. DM type 2
- B. DM type 1
- C. Disturbance of tolerance to glucose
- D. Steroid diabetes
- E. Neurodermia

At a 45 year old man with a normal bodyweight DM was first found out, the treatment by the diet was ineffective, glycemia oscillation during the day is from 10 to 15 mmol/l. What method is the most optimal in this situation?

- A. Sulfanilamide drugs
- B. Insulin
- C. Biguanides
- D. Biguanides in combination with sulfanilamide drugs
- E. Insulin in combination with sulfanilamide drugs

A 45 year old man has been ill with DM for 18 years. A year ago he had cistititis. He gets 0,005 grammes of maninil 3 times per day. Objectively: height is 176 cm. Weight is 82 kg. Oscillation of glycemia on an empty stomach is 10,3-12,4 mmol/l. Proteinuriya was 0,033g/l. For the prophylaxis of the progress of diabetic nephropathy the most appropriate is:

- A. To substitute maninil by insulin
- B. To increase the dose of maninil
- C. To reduce dayly calorage of meals
- D. To add insulin to the therapy
- E. To appoint antibacterial therapy

A woman 45 year old with the obesity of 2 degree by chance during a clinical review was discovered glycemia on an empty stomach 10 mmol/l, glucosuria 3%, acetone in urine (-). The woman's brother suffers from DM. What type of diabetes has the patient got?

- A. DM 2 type
- B. DM1 type
- C. DM 2 type, insulindependent
- D. DM MODY
- E. Secondary DM

Patient., 46 years old, height is 170 cm, body weight is 93 kg. During 2 months he was on a dietotherapy with the limitation of the calorage he lost 5 kg. Glycemia on an empty stomach 12 mmol/l. What therapy should be appointed:

- A. Biguanides
- B. Insulinotherapy
- C. Derivates of sulfoniluria 2 generation
- D. Derivates of sulfoniluria 1 generation
- E. Derivates of sulfoniluria 3 generation

A 64 year old patient, who suffers from DM type 2, was ill with infectious hepatitis A. During 2 last year he's got glibenklamid 15 mg per day. Glycemia on an empty stomach is 13,6 mmol/l. To define the tactics of subsequent treatment of DM is:

- A. Use insulinotherapy.
- B. to appoint biguanides additionally.
- C. To increase the dose of glibenklamid on 20 mg per day.
- D. Not to change the tactics of the treatment.
- E. To transmit a patient into the derivates of sulfonilurine of the 3 generation (glimepirid).
- A 55 year old patient, was found out DM by chance during the prophylactic examination. He did not get treatment. Objectively: height is 170 cm, body weight is 106 kg. The skin of ordinary humidity. Ps - 76/min., rhythmic. The left border of the relative dullness of heart is displaced on 1 cm to the left from the middleclavicular line. Tones of heart are hyposthenic. AP is 160/90. Glycemia on an empty stomach is 7,9 mmol/l. The contents of glucose in the dayly urine is 1% awhile diuresis is 2,5 1. What is the primary tactics of the treatment?
- A. Only dietotherapy.
- B. To appoint metformin.
- C. To appoint glibenklamid.
- D. To appoint repaglinid.
- E. To appoint insulin.
- A 52 year old patient, the growth is 162 cm, body weight is 92 kg. She has been ill with DM type 2 for 2 years. She is on a dietotheraphy. Glycemia on an empty stomach is 12,4 mmol/l, glucosuria is 2,5/l. What therapy is the most appropriate?
- A. Biguanides
- B. Insulin of short action
- C. Insulin of prolonged action
- D. Sulfanilamides of 1<sup>st</sup> generation
  E. Sulfanilamides of 2<sup>nd</sup> generation
- A 52 year old patient, while having some prophylactic review was found glycemia on an empty stomach is 7,2 mmol/l, glucosuria is 0,5 grammes/l. Height is 167 cm, body weight is 92 kg. Define the initial tactics of a doctor in relation to the treatment of the patient.
- A. Dietotherapy
- B. Insulin
- C. Biguanides
- D. Sulfanilamides of the 1 generation.
- E. Sulfanilamides of the 2 generations.
- A 62 -year old patient is ill with DM type 2. Diabetes is compensated by diet and maninil. The patient must be do an operation concerning inguinal hernia. What must the tactics of treatment of DM be?
- A. To appoint preparations of insulin of short action
- B. To replace maninil by glyurenorm
- C. To leave the previous scheme of treatment
- D. To appoint preparations of insulin of the prolonged action
- E. To appoint biguanides

A 63-year-old woman presents with a fasting plasma glucose level of 9,8 mmol/l and no ketones on routine examination. She is asymptomatic and has no evidence of microvascular or macrovascular disease. She is 157 cm (62 in) tall and weighs 51 kg (110 lb). She takes no medications and has no family history of diabetes.

What treatment is necessary in this case?

- A. \*Diet therapy
- B. Insulin therapy
- C. Does not need any treatment
- D. Biguanides
- E. Sulphonilurea medicines

A 63-year old patient suffers from DM type 1. High hyperglycaemia, hyperchloremiya, hypernatriemiya, acute dehydration, developed the background of acute disturbance of cerebral blood circulation. Ketonemia and acetonuria are absent. Define the correct diagnosis.

- A. \* hyperosmolar coma
- B. acute kidney insufficiency
- C. hyperketonemic diabetic coma
- D. chronic kidney insufficiency
- E. hyperlactacidemic coma

A 25 –year old man, who has been ill with DM coma developed. Objectively: the skin is dry, the turgor is dcreased, breathing Kussmaul's, arteriotony - 105/60, the pulse is 116 beats per a minute, smell of acetone in the air. What type of coma can be suspected?

- A. Ketoacidemic coma
- B. Hyperosmolar coma
- C. Hyperlactacidemic coma
- D. Glucopenia
- E. Brain coma

Sick E, 15 year old, has been ill with DM type 1 for 3 years. On the second week of pneumonia there were nausea, vomitting. Lost consciousness in the evening. She was hospitalized. The skin is dry, pale. Breathing is noisy, a mouth is dry, with stratification of brown color. Pulse is 120, BP 80/45. She doesn't react tj the palpation of the stomach irresponsive. Liver +3 cm. The reaction to acetone is sharply positive, glucose of blood is 28 mmol/l. What is the previous diagnosis?

- A. Ketoacidotic coma
- B. Hyperosmolyar coma
- C. Infectiously toxic shock
- D. Diabetic ketoacidosis
- E. Lactacidemic coma

At the patient in the state of diabetic coma pathological cerebral signs appeared during reanimation: twisted face of a person, Babinskiy's symptom. The reanimation was conducted after the mode of large doses. For 4 hours the level of glucose in blood diminished from 28 mmol/l to 11 mmol/l. What can the appearance of pathological cerebral signs be conditioned by in this case?

- A. By surplus of rehydration therapy
- B. By the reaction on introduction insulin
- C. By violation of acid-base balance
- D. By surplus dehydration therapy
- E. By the decline of level of potassium in blood.

A 16 year old girl, who suffers from insulindependent DM, had the temperature of 39°s. The appetite went down, headache, increasing weakness, appeared, then nausea, vomit, somnolence, confusing of consciousness followed. What determine the severity of the condition most probably?

- A. Hyperketonemic condition
- B. Influenzal infection
- C. Acute respiratory disease
- D. Hypoglycemic condition
- E. Hyperosmolyar condition

Sick K., 40 years old, has been ill with DM for 8 years, is in a coma. Objectively: the skin is dry, breathing is noisy, smell of acetone in the air. What type of comma can be suspected?

- A. Ketoacidotic.
- B. Hyperosmolar.
- C. Lactatacidemic.
- D. Glucopenia.
- E. Brain.

Patient K., suffering from Diabetes Mellitus for the past 10 years, fell into a coma. His skin is dry, breathing is loud and there is an acetone smell around him. Pulse 130 /minutes, the arterial pressure 70/45 mmHg. The reaction of the urine to acetone is positive (+++), the glucose of the blood - 30 mmol/1. What type of coma is this?

- A. \*ketoacidosis;
- B. hyperosmolar;
- C. lactic acidosis;
- D. hypoglycemic;
- E. brain.

Patient X., 67 years old. Duration of Diabetes Mellitus type 2 during 9 years. The patient keeps to the prescribed diet, receives regular treatment with oral drugs, and several times in the few last years was treated by sulfonylureas with maximal therapeutic doses. What complication should you consider?

A.\*Hypoglycaemia

B.Hyperglycaemia

C.Diabetic ketoacidosis

D.Hyperosmolarity

E.Lactic acidosis

Patient E, 24 years old, has been suffering from diabetes mellitus type 1 during 3 years. Several days ago she cancelled the insulin. Patient lost consciousness in the evening. She is hospitalized. The skin is dry. Kussmaul's respiration, the odor of acetone from the mouth, the tongue is dry, with fur of brown colour. Pulse is 120 /minutes, the arterial pressure 80/45 mmHg. The abdomen does not react to the palpation. The liver is + 3 cm. The reaction of urine to acetone is positive, the glucose of blood is 28 mmol/1. The preliminary diagnosis is:

A. \*Diabetic ketoacidotic coma

B.Infectious - toxic shock

C.Lactacidemic coma

D.Hepatic coma

E Hyperosmolar coma

The unconscious woman of 25 years old is delivered to hospital. She has been suffering from Diabetes Mellitus for the past 8 years. In the morning the patient could not wake. The skin is dry, the

turgor is reduced, eyeballs are mild. Kussmaul's respiration, the odor of acetone from the mouth. The pulse - 130 /minutes, the arterial pressure is 100/65 mmHg. The liver is +2 cm. The glucose of blood is 25,5 mmol/1. The emergency treatment will consist of introduction:

A.\*Rapid-acting insulin in the dose of 10 U hourly i/v

Insulin of prolonged acting 10 U hourly i/v

40% glucose solution

Reopolyglukin up to 1,0 L

0.9% NaCl solution

Patient C, 24 years old with the 10-years experience of diabetes type 1 is unconscious. He has lost consciousness after intensive physical activity. Objective: a patient is pale, the skin is wet, tongue is wet too. Respiration is superficial, the arterial pressure is 140/70 mmHg. Tone of muscles and tendon reflexes are raised. Establish the diagnosis:

A \*Hypoglycemic coma

B Lactoacidotic coma

C Hyperosmolar coma

D Diabetic ketoacidotic coma

E Cerebral coma

The patient with diabetes type 1, the severe form, is compensated. After a game of football he has lost consciousness. Objective: a patient is pale, the skin is wet, tongue is wet too. Respiration is superficial, the arterial pressure is 110/70 mmHg. Tone of muscles and tendon reflexes are raised, meningeal signs are absent. The emergency treatment will consist of introduction:

A. \*40-80 ml 40% glucose solution

B. Rapid-acting insulin in the dose of 10 U hourly i/v

C. Reopolyglukin up to 1,0 L

D. 0.45% NaCl solution

E. 0.9% NaCl solution

The patient of 63 years old suffers from insulin-dependent form of diabetes. On the background of acute infringement of the cerebral circulation the high hyperglycemia- 56 mmol/1, severe dehydration, hyper-chloremia, hypernatremia have developed. The ketonemia and acetonuria are absent. Establish the correct diagnosis:

A \*Hyperosmolar coma

B Diabetic hyperketonemic coma

C Acute renal failure

D Hyperlactacidemic coma

E Chronic renal failure

Patient R., 45 years old, height is 160 cm, weight is 83 kg. 3 monthes ago he was diagnosed DM type 2, used diet therapy, and lost 5 kg of body mass. Fasting glucose is 12 mmol/l.

What is the next step in his treatment?

A. \*Sulfonilurea medicines of II generation

B. Insulin therapy

C. Sulfonilurea medicines of III generation

D.Biguanides

E. Sulfonilurea medicines of I generation

A previously well 71-yr-old woman has been noticed by her daughter to be increasingly slow and forgetful during several months. She has gained weight and tends to stay indoors with the heating even in warm weather.

Put diagnosis, please.

A \*Hypothyroidism;

B Hashimoto's thyroiditis;

C Cerebral malignancy

D Subacute thyroiditis;

E Graves' disease.

A pregnant woman, 28 years old, habitant of the Carpathian region. In the anamnesis – 10 years ago was treatment of endemic diffuse nontoxic goiter of 1 B grade. Objective review: thyroid gland enlarged 2 grade, smooth, normal texture and homogenous. Periorbital puffiness, Stellwag's, Dalrymple's, Rosenbach's signs are negative. The level of the thyroid hormones is normal. What are principles of the treatment?

A \*Diet, rich in iodine and potassium iodide 200 mg per day diet, rich in iodine.

B Potassium iodide 200 mg per day;

C Potassium iodide 150 mg per day;

D Consumption of meal rich in iodine;

E Only iodized salt;

Asymmetric enlargement of the thyroid gland (II degree) is exposed in patient, 27 years old. The gland is sickly palpatory with irradiation into the lower jaw. The body temperature is 38°C. Patient was ill with flu a week ago. Blood count - increased ESR. Note preliminary diagnosis:

A. \*Subacute thyroiditis;

B. Diffuse toxic goiter;

C. Toxic adenoma of the thyroid gland;

D. Autoimmune thyroiditis;

E. Fibrous thyroiditis.

Patient U., 26 years old, complains of swallowing, weakness, feeling of a "loop" round the neck. In the anamnesis – 10 years ago there was treatment of goiter. Objective review: thyroid gland enlarged III grade, normal texture, homogenous. Periorbital puffiness, Stellwag's, Dalrymple's, Rosenbach's signs are negative. The result of the ultrasound examination: the thyroid gland is increased, the total size is 36 cm³, echogenicity is not changed. The level of thyroid hormones is normal. Median of iodine excretion with urine 100 mkg/l. Substantiate diagnosis:

\*Endemic diffuse nontoxic goiter of the 3 grade

Nodular goiter;

Diffuse nontoxic goiter of the 2 grade

Sporadic diffuse nontoxic goiter of the 2 grade

Diffuse euthyroid goiter of the 2 grade

A previously well 71-yr-old woman has been noticed by her daughter to be increasingly slow and forgetful over several months. She has gained weight and tends to stay indoors with the heating even in warm weather.

Put diagnosis, please.

\*Hypothyroidism;

Cerebral malignancy;

Hashimoto's thyroiditis;

Subacute thyroiditis;

### Graves' disease.

Asymmetric enlargement of thyroid gland (II degree) is exposed in patient, 27 years. The gland is sickly palpatory with irradiation into lower jaw. Temperature of body - 38°C. Patient was ill with flu week ago. Blood count - increased ESR. Note preliminary diagnosis:

- A. \*Subacute thyroiditis;
- B. Toxic adenoma of thyroid gland;
- C. Diffuse toxic goiter;
- D. Autoimmune thyroiditis;
- E. Fibrous thyroiditis.

A 41-yr-old patient presents with sore throat followed by midline tender swelling with pain, red hot skin on the anterior part of the neck. Put the diagnosis, please.

- A. \* Acute thyroiditis;
- B. Thyroglossal cyst;
- C. Subacute thyroiditis;
- D. Toxic thyroid nodule;
- E. Chronic thyroiditis.

At patient M., 29 years old, the asymmetric increase of thyroid gland of the II stage is exposed, a gland is painful while palpation, pain irradiates in the left ear and upper jaw. Temperature of the body 38,7 °C. A week ago she carried a tonsillitis. Most probably the patient has:

- A \*Subacute thyroiditis;
- B Fibrotic thyroiditis;
- C Diffuse toxic goiter;
- D Autoimmune thyroiditis;
- E Toxic adenoma of the thyroid gland.

A female, 72 years old in the severe condition was hospitalizate by emergency. Objectively: The body temperature is 35,8 °C. Blood pressure is 80/50 mmHg, pulse is 56 beats/min, diminished sonority of tones of heart, breathing is 12 /min. A skin is pale, cold, moderate edema of face and extremities. The hairs are liquid, thin, on a head areas of alopecia. Most reliable that patient has:

- A \*Myxedema coma;
- B Addisonic crisis;
- C Lactacidotic coma;
- D Hypoglycemic coma;
- E Hypocalcemia.

A patient B., 59 years old complains of the presence of nodule on the front surface of neck. Became ill 3 years ago. A nodule was enlarged in sizes, the timbre of voice changed, feeling of pressure appeared. Objectively: in the right lobe of the thyroid the nodule is palpated 5 cm in the diameter, painless. The functional state of thyroid is not changed. What is the diagnosis?

- A \*Cancer of thyroid gland;
- B Nodular euthyreoid goiter;
- C Nodular hyperthyroid goiter;
- D Chronic lymphomatous Hashimoto thyroiditis;
- E Chronic fibrous Ridel's thyroiditis.

A female, 62 years old, suffers from pernicious anaemia for which she has received 1 mg cyanocobalamine intramuscularly every 3 month for the last 10 years. For the routine visit the patient

came with a puffy swollen face due to a non-pitting edema. Her skin is dry and cold, the heart rate is 55 beats/ min, her hair is sparse, and she complains of constipation and fatigue. A series of blood tests reveals the following: high levels of microsomal autoantibodies against the thyroid gland and autoantibodies against her parietal cells. The TSH concentration in the plasma is high, whereas the T<sub>3</sub>, T<sub>4</sub> are low. The haematological variables are satisfying. What is the probable diagnosis?

A \*Autoimmune (Hashimotos) thyroiditis, hypothyroidism;

B Hypothyroidism;

C Cardiac insufficiency;

D Pernicious anaemia;

E Nephrotic syndrome.

A 53 year old woman came to the polyclinic. She had no symptoms but gave a history of a lump in her neck being noticed by her primary care physician during a routine 'well-woman' check. There was no family history of thyroid disease and she had a blameless past medical history. She had not noticed any change in her voice, or difficulty swallowing or breathing. Examination was entirely normal, except thyroid gland enlargement of the II grade, normal texture, homogenous for a  $3 \times 2$  cm single nodule in the left lower thyroid gland. Blood tests showed that her total  $T_4$ , free  $T_3$ , TSH -normal, and thyroid autoantibodies were not present in serum. What is the probable diagnosis?

A. \*Nodular goiter;

B. Endemic diffuse nontoxic goiter;

C. Diffuse nontoxic goiter;

D. Sporadic diffuse nontoxic goiter;

E. Diffuse euthyroid goiter.

A 28 year old woman with the recent tiredness and difficulty concentrating had experienced a decline in memory over the last several months. She also noted decreased frequency of bowel movements and an increased tendency to gain weight. She felt chilled without light sweater, even in warm weather. In the anamnesis - hypothyroidism in her mother and older sister. Objectively: She had a slightly puffy face and her eyebrows were sparse, especially at the lateral margins. The thyroid gland is not palpated. Heart rate is 58 beats/min, BP is 100/60 mmHg. Tones are of heart of low sonority. The deep tendon reflexes were normally contractive, but showed delayed relaxation. What laboratory tests would you appoint to evaluate this patient?

A \*All methods.

B Ultrasound thyroid gland;

C Test for anti-thyroid antibodies (anti-thyroglobulin and anti-microsomal);

D Blood tests: levels T3, T4 and TSH;

E ECG;

Enlargement of thyroid gland was defined in a woman, 25 years old, during the examination. She lives in the Carpatian mountain region. Abnormalities in internal organs were not fixed. Thyroid gland is diffusely enlarged to II degree, it's softly-elastic, smooth, painless. Levels of thyroid hormones are normal. US: thyroid gland is enlarged, echogenicity is not changed. Note the most credible diagnosis:

A. \*Endemic diffuse euthyroid goiter, II degree;

B. Autoimmune thyroiditis, euthyrosis;

C. Nontoxic diffuse euthyroid goiter, II degree;

D. Nodular goiter;

E. Chronic thyroiditis.

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 thelong-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 manifestati-on, 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: hei-ght - 176 cm, weight - 82 kg. Glycemia variability on an empy 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 di-abetic 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 complai-ns 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 ri-ght 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 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 si-gnificantly weakened, heart rate -60/min, AP- 80/40 mm Hg. The abdomen is slightly painful in the epigastrial region. In blood:

WBCs - 8, 1 · 109/l, glucose - 3,0 millimole/l. What is the most

likely diagnosis?

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

A 3-year-old child has been di-agnosed with type I diabetes mellitus, hyperosmolar coma. The laboratory confi-rmed 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 densi-ty progressed, the skin became of a waxen 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 count 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 regi-ons. Changes in the internal organs are absenr. 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. Objecti-vely: 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 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. Defection 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 · 109/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, 5oC, 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 hass 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?

- 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

Male 30 y.o., noted growingfingers and facial scull, 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 - hiasmatic arachnoiditis

D.Adrenal gland tumor

E.Tumor of pondo-cerebellar corner

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 guanyl guanidines

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 thyroidgland 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

A 38 y.o. patient was urgently admi-tted to the hospital with complaints of sudden weakness, dizziness, loss of consci-ousness, body weight loss, nausea, vomiting, severe pain in epigastric area, di-arrhea, skin hyperpigmentation. What is the most probable diagnosis?

A.Addisonic crisis

B.Acute gastroenteritis

C.Meningoencephalitis

D.Scleroderma

E.Pellagra

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

A 12 y.o. child with acute glomerulonephritis presented with hypertensive syndrom 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. Infibits deppresive action of prostaglandins

D. Increases erythropoetin production

### E. Increases renine level

A 26y.o. male patient with postoperative hypothyroidism take thyroxine 100mg 2times 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 mercasolil to the treatment
- E. To administer sedatives

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

A.Hypoglycemia

B.Hypocalcemia

C.Hyperbilirubinemia

D.Hyperkaliemia

E.Hypomagnesemia

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

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 st 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

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

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 fetoproteinum
- C. Bacteriological examination of discharges from vagina
- D. A cardiophonography of fetus

E.US of fetus

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

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 atnthe 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

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

A 63 y.o. patient was operated on account of big multinodular euthyroid goiter. Despite of techical difficulties a forced subtotal resection of both partsof 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

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 19millimole/l. What acute condition is it?

A.Ketoacidotic coma

B.Hyperosmolar coma

C.Cerebral coma

D.Hepatic coma

# E.Acute renal insufficiency

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, to-35,80 C,ESR-58/min, AP-105/60mm 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