Diabetes mellitus

1. The function of insulin is ...
1. maintain a normal blood glucose level
2. the release of glucose from the liver

2. In severe insulin deficiency increases blood glucose and ...
1. develops polyuria
2. developing dehydration
3. edema
4. develop ketosis

3. Diabetes is usually defined ...
1. availability of insulin in urine
2. the presence of glucose in urine
3. the level of glucose in the blood

4. When the maximal insulin secretion in healthy individuals?
1. during sleep
2. immediately after eating
3. a few hours after eating
4. in a state of hunger

5. Insulin is produce in:
1. alpha cells of the pancreas
2. exocrine glands (cells) of the pancreas
3. the beta cells of the pancreas

6. Insulin is ...
1. protein
2. hormone
3. carbohydrate
4. enzyme

7. Which of the following factors stimulates insulin secretion?
1. reduction in blood glucose
2. the process of digestion
3. kind of food
4. increasing the level of glycemia

8. Gestational diabetes ...
1. occurs in patients with excess supply
2. occurs in patients already with diabetes during pregnancy

3. occurs in cases where a pregnant discover diabetes
4. is a temporary condition, always going after pregnancy

9. Oral glucose tolerance test (OGTT)
1. commonly used 55g glucose load;
2. can be dangerous and should not be used in elderly
3. If fasting glucose 8 mmol / l, for diagnosis is necessary to OGTT
4. by OGTT can make a differential diagnosis between type 1 diabetes and type 2
5. is usually load for adults - 75 g of glucose

10. Why glycosuria is often a consequence of hyperglycemia?
1. because damaged kidneys
2. because the kidneys are unable to reabsorb all the glucose filtered blood

11. Prevalence of diabetes ...
1. increases in Asia
2. ranges from 2 to 10% in most countries
3. the highest in the ethnic group, the Pima Indians

12. The high level of plasma insulin has the following effect:
1. stimulates the deposition of fat in adipose tissue
2. enhances protein catabolism

13. Hyperglycemia in diabetes develops due to insulin deficiency. It develops because ...
1. The breakdown of liver glycogen into glucose
2. glucose is not absorbed by muscle tissue
3. glucose is not absorbed by fatty tissue
4. The breakdown of protein during gluconeogenesis;

14. Diabetes can be caused by ...
1. endocrine diseases such as Cushing's syndrome, acromegaly, etc.
2. autoimmunity
4. chocolate consumption

15. The etiological classification of diabetes mellitus according to the WHO, 1999 ...
1. Type 1 diabetes
2. aggravation insulita
3. other specific types of diabetes
4. Diabetes is associated with malnutrition

16. In diabetes ...
1. elevated blood glucose levels
2. fat breakdown supressed
3. accelerated fat breakdown
4. breakdown of proteins is suppressed

17.Arrange the types of diabetes mellitus by its frequency of occurance (the most common being first)
1. Type 1, type 2, and other types of diabetes
2. other types of diabetes, type 1, type 2
3. type 2, type 1, and other types of diabetes;

18. The period of so-called honeymoon in diabetes
1. occurs only in patients with type 2 having hypoglycaemia during honeymoon
2. refers to patients with type 1 diabetes has just entered into a marriage relationship
3. another name for remission of type 1 diabetes, when temporarily is restored the ability of the pancreas to the development of insulin
4. usually after 3 - 6 months after the start
Insulin

19. Type 1 diabetes is also known as ...
1. insulin-dependent diabetes mellitus
2. insulin independent diabetes mellitus
3. juvenile diabetes
4. clinical diabetes

20. In type 1 diabetes ...
1. Patients young and more commonly under 30 years of age;
2. It is a consequence of autoimmune process that leads to the death of beta cells;
3. The clinical onset of the disease is usually sudden and sharp

21. Diabetes:
1. Type 1 diabetes usually develops before 30 years;
2. Type 2 diabetes develops most often after age 30;
3. in patients with type 2 diabetes develops ketosis easily;
4. Type 2 diabetes is a disease with mild severity

22. Patients with type 2 diabetes ...
1. gradual onset;
2. prone to ketosis;
3. mostly young;

4. Obligatory obesity;

23. For Type 1 diabetes is characterized by ...
1. up to age 30 years:
2. is the result of an autoimmune process;
3. related to obesity

24. In untreated diabetes have the following signs and symptoms ...
1. weight loss;
2. blurred vision;
3. thirst and polyuria;
4. balanitis;
5. loss of hair;

25. Which of the OGTT results confirm the diagnosis of diabetes?
1. the level of postprandial plasma glucose 2 hours above 11.1 mmol / L;
2. glucose levels throughout the study for more than 7 mmol / L;
3. level of postprandial (after 2 hours) 10mmol / L and fasting 6 mmol / L;
4. the level of a random plasma glucose more than 11.1 mmol / L;

26. In type 1 diabetes ...
1. the pancreas does not produce insulin;
2. insulin is not able to increase glucose utilization;
3. in cells, apparently, there is a lack of insulin receptors;
4. the level of blood glucose is high;

27. What are the most common cutaneous manifestation of diabetes mellitus:
1. pale skin;
2. itching of the skin and mucous membranes;
3. furuncules
4. dry skin and hyperkeratosis;

28. What criteria satisfactory compensation of carbohydrate metabolism by the level of glycated hemoglobin:
1. 11.5%
2. 7.0%
3. 13%
4. 3%

29. Name the leading symptoms of the initial period of diabetes:
1. thrist
2.oliguria;

3. polyuria;
4. loss of body weight;
5. dry mouth

30. What are the main laboratory findings confirming the presence of diabetes:
1. hyperglycemia;
2. hypoglycemia;
3. glycosuria;
4. leukocytosis;
5. hypercholesterolemia

31. What are the levels of glucose in whole capillary blood should be treated as a diabetes
1. Fasting> or = 6.7 mmol / L
2. Fasting> or = 5.5 mmol / L
3. random 10 mmol / L
4. random> or = 11.1 mmol / L

32. What glucose tolerance test match of diabetes:
1. Fasting> or = 6.1 mmol / L, 2 hours> or = 9 mmol / l
2. Fasting> or = 6.7 mmol / L, 2 hours> or = 11.1 mmol / L
3. Fasting> or = 5.7 mmol / l, 2 hours> or = 7.8 mmol / L
4. Fasting> or = 7.8 mmol / L, 2 hours> or = 11.1 mmol / L

33. First hypoglycemic effect of rapid-acting insulin (insulin analogues) is manifested through:
1. 40 min
2. 30 min
3. 15 minutes

34. What are the diagnostic criteria of type 1 diabetes:
1. ketonuria or ketoacidosis
2. proteinuria
3. rapid onset of the disease
4. weight loss
5. young age

35. Name the indicative criteria of good and satisfactory compensation of carbohydrate metabolism by the level of sugar in the urine:
1. 0 mmol / s
2. <100 mmol / s
3. 200 mmol / s

36. List the absolute indications for insulin therapy:
1. MODY - diabetes;
2. Type 1 diabetes
3. Type 2 diabetes
4. gestational diabetes
5. diabetic ketoacidosis

37. What are drugs used for the treatment of diabetes in pregnancy
1. short-acting insulin;
2. biguanides
3. sulfonylurea drugs

38. Appointment of hypoglycemic drugs sulfonylurea drugs as a first line of treatment is indicated in:
1. stable type 2 diabetes
2. Type 1 diabetes
3. diabetes complicated by nephropathy
4. Gestational diabetes
5. diabetes in obese people

39. List the situations that lead to an increase in insulin requirements:
1. stress
2. infection
3. muscle work
4. starvation

40. What are drugs used for the treatment of ketoacidosis in diabetes mellitus:
1. longer-acting insulin
2. short-acting insulin
3. short-acting insulin in combination with sulfonamides
4. short-acting insulin in combination with biguanides

41. What hypoglycemic agents used in abdominal surgery and long:
1. short-acting insulin
2. Sulfa hypoglycemic agents
3. biguanides
4. longer-acting insulin

42. What kind of data should be considered when calculating the daily caloric intake in patients with diabetes mellitus:
1. growth

2. weight
3. age
4. physical activity
5. type of therapy

43. What are selectively toxic substances affecting the beta cells:
1. streptozocin
2. diazoxide
3. alloxan
4. vakor
5. ascorbic acid

44. What are the basic principles in the treatment of type 1 diabetes:
1. insulin
2. Diet
3. exercise
4. self monitoring
5. immunomodulating therapy

45. In what cases, the patient should adjust their own dose of insulin:
1. changes in glucose levels determined by counting caloric and bread unit
2. extra meal
3. upcoming exercise
4. ketoacidosis
5. concomitant diseases

46. What are the main issues must be trained a diabetic?
1. self-monitoring of blood glucose
2. plan of diet
3. exercises
4. treatment of diabetic coma
5. correction treatment with concomitant diseases

47. What are the laboratory findings help confirm or reveal dysfunction of beta cells in the pancreas?
1. hyperglycemia
2. glycosuria
3. Microalbuminuria
4. ketonuria
5. the absence or low levels of C-peptide

48. List the priorities arising from the treatment of type 1 diabetes in young people and people of working age:

1. to achieve as close to normal levels of glucose within days
2. to ensure normal growth and development of the patient's physical
3. provide a high exercise capacity
4. To prevent severe hypoglycemia

49. In planning the treatment of type 1 diabetes must be considered:
1. The age of the patient
2. the level of residual insulin secretion
3. a way of life and physical activity
4. financial and social situation of the patient
5. individual training of the patient in a nutrient and energy count

50. How to carry out the correction scheme of insulin therapy if the patient receiving only intermediate-acting insulin (morning and evening), there is a pronounced hyperglycemia after breakfast and dinner:
1. uniformly increase the dose of insulin before breakfast and dinner
2. increase the morning dose of insulin
3. Add a short-acting insulin
4. introduce an additional injection of insulin before dinner expectancy

51. What are the possible complications of insulin therapy:
1. hypoglycemia
2. syndrome Somodji
3. allergy to insulin
4. post-injection of lipodystrophy
5.Insulitis

52. What are the possible causes of hypoglycemia:
1. an overdose of insulin
2 .The use of alcohol with insulin therapy
3. supercooling
4. lack of carbohydrate intake with administration of insulin

53. Somogyi syndrome is:
1. congenital syndrome, accompanied by diabetes
2. chronic overdose of insulin leading to hypoglycmia and compensated hyperglycemia
3. syndrome due to prolonged insulin deficiency
4. syndrome, hormone deficiency cotrainsulin hormones

54. If a patient receiving 20 - 40 units / day of insulin, blood glucose 13.3 mmol / L, to reduce the blood glucose level of 2.2 - 2.8 mmol / L required, as a general rule:

1. 5.0 - 6.0 units of insulin
2. 1.0 - 3.0 units of insulin
3. 0.5 - 1.0 units of insulin

55. Maximum hypoglycemic effect rapid-acting insulin (human insulin analogues) is manifested through:
1. 1.5 - 3 hours
2. 4 - 8 hours
3. 0.5 - 2 hours

56. If the blood glucose 13.3 mmol / L, but no ketones in the urine, the daily dose of insulin is increased by:
1.. 5%
2. 10%
3. 15%
4. 20%

57. What should a diabetic patient do , if he has to introduce additional insulin
1. take fast-digesting carbohydrates
2. short-term intense exercise
3. take more proteins
4. take morefats

58. If ketonuria glucose level less than 10 mg / dL, you must:
1. increase the dose of insulin by 10%
2. to remove fat from the diet
3. increase the amount of liquid with a high-carbohydrate
4. increase physical activity

59. For the early detection of diabetic nephropathy should:
1. to define microalbuminuria
2. to determine urea nitrogen and creatinine in blood
3. determine the creatinine clearance
4. control of daily urine

60. Proteinuria and hypertension during the first 10 years after the manifestation of type 1 diabetes:
1. evidence of diabetic nephropathy
2. often may be a manifestation of other diseases

61. Name the non-genetic risk factors for type 2 diabetes:
1. Obesity

2. lack of exercise
3. intrauterine starvation
4. Stress

62. Polygenic forms of type 2 diabetes is characterized by:
1. insulin resistance
2. relative insulin deficiency
3. dyslipidemia
4. insulitis

63. Monogenic forms of type 2 diabetes is characterized by:
1. disturbance in insulin secretion
2. insulin resistance
3. hyperinsulinemia

64. What determines the degree of caloric restriction in a patient with type 2 diabetes with obesity:
1. the degree of obesity
2. physical activity
3. age
4. sex
5. general state of health

65. What to do if against low-calorie diet in a patient with type 2 diabetes developed severe metabolic disorders?
1. cancel a diet with caloric restriction
2. transfer of a patient on a diet providing 1000 - 1200 kcal / day
3. insulin administered in adequate doses
4. control of body weight and blood glucose

66. What are the main mechanisms of action of hypoglycemic drugs sulfonylurea derivatives:
1. blocking the ATP-sensitive potassium channels in the membranes of beta cells
2. suppression of glucose production in the liver
3. suppression of cleavage of insulin in the liver
4. reduction of glucose absorption in the intestine

67. What are the indications sulfonylurea drugs:
1. lack of compensation against the diet and physical activity
2. lack of tendency to develop diabetic ketoacidosis and ketonemii
3.during honeymoon period in patients with type 1 diabetes

68. What are contraindications to drugs sulfonylurea derivatives:
1. type 1 diabetes
2. diabetic ketoacidosis, precoma, coma
3. severe diabetic nephropathy
4. heavy surgery
5. pregnancy, lactation

69. What is your tactic, if after a month of treatment with maximal doses of the drug sulfonylurea level of fasting plasma glucose 7.0 mmol / l, and after eating 13.9 mmol / l:
1. Back to product
2. appoint an additional insulin
3. completely on insulin
4. additionally designate another drug sulfonylurea

70. In which patients with type 2 diabetes, insulin requirements above:
1. in patients with severe obesity and sedentary
2. lean and physically active
3. patients with severe metabolic disorders
4. in patients with concomitant diseases and stress

71. How shall adjust the insulin scheme during hyperglycemia?
1. introducing more short-acting insulin in the early morning hours
2. transfer of the extended evening dose of insulin action at bedtime to a later time
3. increasing the dose of longer-acting insulin before dinner
4. increase the dose of insulin before meals short

72. What are the mechanisms of action of biguanides:
1. increase in glucose utilization
2. increase in hepatic glucose production
3. increase in glucose uptake in muscle and adipose tissue
4. increased glucose absorption in the gastrointestinal tract

73. What are the possible side effects of biguanides:
1. increased appetite
2. diarrhea
3. metal or bitter taste
4. lactic acidosis

74. What are contraindications to biguanides:
1. type 1 diabetes
2. diseases of the liver and kidney dysfunction

3. obesity
4. alcoholism
5. acute infectious diseases

75. Indication for insulin therapy in type 2 diabetes:
1. heavy surgery
2. concomitant corticosteroid therapy
3. acute infectious diseases
4.diabetic nephropathy, accompanied by renal insufficiency
5.TB infection

76. What are the known mechanisms of complications of diabetes:
1. activation of the polyol pathway of glucose
2. suppression of the synthesis of myo-inositol
3. increased activity of Na +, K +-ATPase
4. non-enzymatic glycation of proteins

77. What are the clinical and laboratory parameters characterize the incipient stage renal disease:
1. microalbuminuria (30 to 300 mg / day)
2. proteinuria (greater than 500 mg / day)
3. GFR is normal or high
4 .increase in blood pressure unstable
5. arterial hypertension

78. What are the clinical and laboratory parameters characterize the stage of severe nephropathy:
1. microalbuminuria (30 to 300 mg / day)
2. proteinuria (greater than 500 mg / day)
3. GFR is normal or mildly reduced
4. unstable increase in blood pressure
5. Hypertension

79. What are the stages of diabetic nephropathy are reversible:
1. the initial stage of structural change
2. severe nephropathy
3. kidney hyperfunction
4. starting nephropathy
5. uremia

80. What is the first-line agents in the treatment of diabetic nephropathy,

hypertension
1. enalapril
2. obzidan
3. ramipril
4. gipotiazid

81. What is the approach for the management of diabetic nephropathy in the presence of proteinuria
1. Correction of carbohydrate metabolism
2. diet with reduced fat and increase in the number of vegetable protein
3. correction of blood pressure
4. the restriction of animal protein in the diet to 0.6 - 0.7 g / kg body weight
5. the correction of lipid metabolism

82. What forms of diabetic foot:
1. neuropathic
2. Vascular
3. coronary
4. Mixed
5. Peptic

83. What are the basic principles of conservative treatment of infected neuropathic diabetic foot shape:
1. optimization of metabolic control
2. Antibiotic
3. physiotherapy, improving blood flow to the extremities, massage
4. local treatment of wounds
5. rest
6. Removal of the portion of hyperkeratosis

84. Treatment of diabetic foot:
1. optimization of metabolic control
2.Antibiotic
3. physiotherapy, improving blood flow to the extremities, massage
4. local treatment of wounds
5. removal of sections of hyperkeratosis

85. What characterizes bone changes in diabetic osteoarthropathy:
1. Osteoporosis
2. osteolysis

3. osteomyelitis
4. hyperostosis
5.Charcot foot

86. What are the manifestations of neuropathy diabetic foot shape:
1. pale skin, cyanotic
2. pale skin or normal color
3. feet cold
4. feet warm
5. reduced sensitivity
6. sensitivity saved

87. What are the clinical features of coronary artery disease in patients with diabetes mellitus:
1. the same frequency of coronary heart disease in men and women
2. the high frequency of painless forms of CHD
3. lower risk of sudden death
4. higher incidence of post-infarction complications
5. higher mortality after myocardial infarction within the first week or the first month

88. How does the hematocrit measurement accuracy using glucose test strips:
1. high level - decrease
2. High level- increase
3. Low level_increase
4. Low level - decrease
5. hematocrit does not affect blood glucose

89. Does the presence of anemia in patients with diabetes for glucose levels, determined by test strips?
1. results in anemia glucose increase
2. glucose results in anemia decrease
3. anemia does not affect blood glucose

90. What is an insulin autoimmune syndrome?
1. syndrome characterized by diabetes mellitus type 1 autoimmune origin

2. a clinical syndrome characterized by a combination of recurrent severe hypoglycaemia with hyperinsulinemia and high titer of antibodies to insulin;
3. clinical syndrome type 2 diabetes an autoimmune origin

91. Hypoglycemia is ...
1. syndrome characterized by hyperinsulinism
2. syndrome associated with insulin deficiency
3. syndrome caused by the fall of plasma glucose fasting blood less than 3.3 mmol / l, 3 - 4 hours after eating less than 2.8 mmol / L;
4. syndrome caused by the fall of plasma glucose fasting blood less than 3.5 mmol / l, 3 - 4 hours after administration of glucose less than 5.5 mmol / L;

92. In response to hypoglycemia Somatotropin Hormone ...
1. enhances hepatic gluconeogenesis
2. inhibits hepatic gluconeogenesis
3. enhances the utilization of glucose by muscles
4. inhibits glucose utilization by muscles

93. What are the clinical signs of hypoglycemia:
1. sweating
2. hunger
3. dry mouth
4. nausea, vomiting

94. What are the neurological manifestations accompanied by hypoglycemia?
1. headache
2. blurred vision
3. amnesia
4. hypothermia

95. What is one (bread unit)?
1. amount of bread needed sick day
2. amount of bread increases blood glucose by 1 mmol / L
3. the amount of product that contains 10 - 12 grams of carbohydrates
4. amount of energy needed for 1 IU of insulin

99. Home hypoglycemic effect of short-acting insulin is manifested through:
1. 40 - 60 minutes
2. 20 - 30 minutes
3. 15 - 30 minutes

100. First hypoglycemic action of insulin expectancy is manifested through:
1. 1.5 - 2 hours
2. 4 - 6 hours
3. 6 - 8 hours

101. Maximum hypoglycemic effect of insulin intermediate-acting manifested through:
1. 2 - 4 hours
2. 4 - 8 hours
3. 8 - 12 hours

102. What products can not be counting on the bread units?
1. peas
2. potatoes
3. spinach
4.Mushrooms

103. In what cases should be carried out glucose tolerance test?
1. when the concentration of glucose in the blood at random measurement more than 5.8 mmol / l (plasma greater than 6.7 mmol / L)
2. a history of gestational diabetes
3. severe glucosuria at the time of inspection or in history

104. What diabetic patients should do, so that blood glucose is not high?
1. completely eliminate carbohydrates from food
2. daily meals divided into 5 - 7 receptions
3. limit or eliminate the intake of simple sugars and double
4. increase the amount of protein in the diet

105. What sweeteners contain no calories?
1. Xylitol
2. aspartame

3. saccharin
4. cyclamate

106. What are the main effects of the repaglinide:
1. associated with food induce insulin secretion
2. reduces the risk of severe hypoglycaemia by 60% compared to sulfonylurea derivatives
3. reduces appetite
4. reduces carbohydrate absorption in the gastrointestinal tract

107. What are the maximum daily dose of repaglinide:
1. 4 mg
2. 8 mg
3. 16 mg
4. 2 mg

108. By how much one bread unit raises the blood glucose level ?
1. 1 mmol / L
2. 1.5 - 1.9 mmol / L
3. 2 - 3 mmol / l

109. What ice cream slowly increase blood sugar in patients with diabetes?
1. fructose
2. butter
3. milk

110. At the use of any of potatoes will rise slower blood glucose (depending on the method of preparation)?
1. mashed in water
2. fried potatoes
3. boiled (whole)

111. What is not allow to do with a diabetic foot patient?
1. warm the feet with hot water
2. use for foot care blade, sharp scissors
3. wearing tight shoes, high-heeled shoes

4. walk barefoot

112. When can we identified acetonuria?
1. when blood glucose above 13 mmol / l
2. with intercurrent diseases
3. nausea, vomiting
4. starvation

113. What are the main causes of hypoglycemia?
1. an overdose of insulin
2. overeating
3. insufficient use of carbohydrates
4. excessive exercise
5. kidney disease

114. What methods insulin intermediate-acting?
1. intravenous
2. intramuscular
3. subcutaneous
4. by phonophoresis

115. Which of the drinks can a patient with diabetes drink without restrictions?
1. apple juice
2. milk
3. vodka
4. mineral water

117. The mechanism of action of biguanides:
1. increase in glucose utilization
2. reduction of hepatic glucose production
3. reduction of glucose absorption in the gastrointestinal tract
4. decrease in glucose uptake in muscle and adipose tissue

118. Contraindications to the appointment of biguanides:
1. acute complications of diabetes
2. Pregnancy

3. Type 1 diabetes
4. pulmonary heart disease

119. What are drugs that increase the hypoglycemic activity of sulfonylurea drugs through changes in pharmacokinetics?
1. clofibrate
2. Antibiotics
3. salicylates
4. some sulfonamides

120. What is the level of daily urinary albumin excretion characterizes microalbuminuria?
1. 10 - 30 mg
2. 30 - 300 mg
3. 100 - 500 mg

121.Which products, shorten the half-life, speeding up metabolism?
1. rifampicin
2. salicylates
3. chronic alcohol
4. indomethacin

122. The extra pancreatic action of sulfonylurea drugs?
1. the activity of glycogen synthesis
2. hepatic lipogenesis
3. stimulation of glucose transport in skeletal muscle and adipose tissue
4. increase activation of insulin

124. What is the risk to a child born of a diabetic mother?
1. congenital malformations in 2 times more
2. asphyxia
3. macrosomia
4. hypoglycemia
5. hyaline membrane disease

125. At what level of blood glucose can start exercise?
1. 17 mmol / L

2. 14 mmol / L
3. 10mmol / L
4. 4 mmol / l

126. What should be done when a high temperature?
1. make an additional injection of regular insulin at 10% of the daily, if temperature does not exceed 38 ° C
2. to increase the daily dose of insulin by 25% for each degree that exceeds 37.5C
3. increase daily insulin dose by 20%
4. limit the amount of carbohydrates

127. Signs of metabolic syndrome (syndrome X) are ...
1. increase VLDL and HDL
2. hypertension, insulin resistance and hyperinsulinemia
3. reduced levels of HDL, android obesity, hypertension, and hyperinsulinemia

128. What is the blood glucose during oral glucose tolerance test standards:
1. Fasting <or = 6.2 mmol / L, 2 hours <or = 8.7 mmol / L
2. fasting <or = 5.0 mmol / L, 2 hours <6.7 mmol / l
3. Fasting> or = 3.3 mmol / L, 2 hours <or = 7.9 mmol / L
4. Fasting <or = 5.5 mmol / L, 2 hours <or = 11.1 mmol / L

129. How do the values of plasma glucose from venous blood glucose in whole capillary blood:
1 a 15% increase;
2. a 15% decrease;
3. a 25% increase;
4. 25% less

130. The criteria for good compensation for diabetes mellitus glucose:
1. Fasting <or = 6 mg / dL after meals <or = 8 mmol / L;
2. Fasting <or = 8 mg / dL after meals <or = 11 mmol / L;
3. Fasting <or = 10 mg / dL after meals <or = 13 mmol / L

131. What are the indications for the use of biguanide antidiabetic drugs:
1. gestational diabetes

2. diabetes and cirrhosis of the liver
3. juvenile diabetes
4. diabetic nephropathy
5. Type 2 diabetes in children

132. beta cell viruses are

1. Coxsackie
2. Mumps
3. Rubella
4.Chicken Pox
5. measles
6. cytomegalovirus

133. What are the parameters determined by the evaluation of the effectiveness of insulin therapy:

1. Fasting blood glucose levels;
2. blood glucose levels one hour after meal
3. blood glucose 2 hours after a meal
4. the level of glycated hemoglobin (HbAIc)
5. level of daily glycosuria

134. What are the possible methods of introducing longer-acting insulin:

1. intravenous
2. intramuscular
3. subcutaneous
4. intranasal
5. Ingestion

135. When can we allow patient of type 1 diabetes in outpatient, with a high level of blood glucose?

1. If hyperglycemia is not accompanied by dehydration and vomiting
2. if the patient is able to communicate daily with your doctor on the phone, at home or in the clinic
3. in ketoacidosis
4. if the patient belongs to the oldest age group
5. children and adolescents, who along with his parents have been trained in the schools of diabetes

136. How to make a correction scheme insulin therapy if the patient is receiving short-acting insulin in combination with the medium duration of insulin resulted in significant hyperglycemia after breakfast and dinner:
1. The need to increase the dose of short-acting insulin
2. necessary to increase the dose of intermediate-acting insulin
3. need to introduce an additional injection of intermediate-acting insulin before dinner
4. need to introduce an additional injection of long-acting insulin at bedtime

137. postinjection lipodystrophy:
1. develop at the injection sites in the form of lipoatrophy
2.develop at the injection sites in the form of lipohypertrophy
3. is characterized by impaired insulin absorption
4.The reason for the development - acidic pH of insulin
5.The reason for the development - local allergic reaction

138. If a patient receiving 20 - 40 units / day of insulin, blood glucose 13.3 mmol / l, an additional 0.5 - 1.0 units of short-acting insulin is usually lower the level of glucose in:
1. 4.0 mmol / l
2. 2.2 - 2.8 mmol / L
3. 1.0 - 1.5 mmol / L
4. 5.0 mmol / L

139. If your blood glucose 13.3 mmol / l and ketones in the urine is, the daily dose of insulin is increased by:
1. 5%
2. 10%
3. 15%
4 .20%

140. What diet should be recommended to patients with diabetes type 2 diabetic obese elderly?
1. low-calorie (600 - 900 kcal / day)
2. subcalorie (1200 kcal / day)
3. starvation 1 - 2 days a week

141. What negative consequences can be accompanied by a rapid decrease in body weight in patients with type 2 diabetes using a low calorie diet?
1. severe hyperglycemia
2. ketonemia
3. plasma hyperosmolarity
4. dyslipoproteinemia

142. Name of the second generation sulfonylurea drugs:
1. chlorpropamide
2. Gliclazide
3. glibenclamide
4. glipizide
5. carbutamide
6. glikvidon

143. What are the clinical and laboratory parameters characterize uremic stage of diabetic nephropathy:
1. GFR 10 mL / min
2. high GFR
3. Hypertension
4. symptoms of intoxication
5. Microalbuminuria

144. Specify the indications for hemodialysis or peritoneal dialysis:
1. glycemia more 16.6 mmol / L
2. an increase in serum creatinine of up to 8 - 9 mg% (600 - 700mkmol / L)
3. reduction in the glomerular filtration rate less than 10 ml / min
4. anemia

145. What are the risk factors for diabetic foot:
1. duration of diabetes more than 10 years
2. age over 40 years
3. foot deformity
4. Smoking
5. poor selection of shoes

146. What is the treatment of neuropathic edema?
1. optimization of metabolic control
2. diuretics
3. sympathomimetic
4. restricted diet of salt and protein

147. The recommended composition of the diet for people with diabetes and coronary artery disease:
1. 55-60% carbohydrates, mostly unrefined adding soluble fiber to 30 g / day
2. 50% carbohydrates, avoid refined, mostly insoluble dietary fiber and 30 g / day
3. Fat 25 - 30% with the restriction of saturated fat to 10%
4. fat and 20% polyunsaturated fats limited to 10%
5. salt restriction in the development of hypertension up to 3-6 g / day
6. alcohol limit in patients with obesity, hypertension and hypertriglyceridemia

148. How does the presence of polycythemia on blood glucose levels, determined by test strips?
1. glycemia increas
2. the level of glycemia decrease
3. glycemia is not changed

149. In response to hypoglycemia, adrenaline ...
1. inhibits glucose utilization by muscles
2. increased utilization of glucose by muscles
3. increases hepatic gluconeogenesis
4. stimulates the secretion of glucagon
5. inhibits the secretion of insulin

150. If any of recurrent hypoglycaemia in patients with type 1 diabetes need to:
1. check the technique of insulin administration
2. check visual acuity
3. reduce carbohydrate intake
4. check the methodology for analysis

151. What should be taken for the level of sugar in diabetic patients in the

blood not to be very high?
1. completely eliminate carbohydrates from food
2. daily meals divided into 5 - 7 receptions
3. limit or eliminate the intake of simple sugars and double
4. increase the amount of protein in the diet

152. What is the average amount of insulin necessary to compensate for one carbohydrate?
1. 1.5 - 3 units
2. 0.5 - 1 U
3. 4 - 6 units

153. When is the best time to exercise patient with diabetes?
1. in the morning, before breakfast
2. evening, before bedtime
3. for 30 minutes. before meals
4. by 1 to 1.5 hours after a meal

154. What pancreatic effects of drugs of sulfanourease?
1. stimulating the release of insulin from the beta cells
2. increased the synthesis of insulin
3. increase receptor sensitivity and beta-cell glucose
4. suppression insulin

155. What should be done when a high level of blood glucose and acetone in the urine?
1. in addition to enter 20% of the daily dose of regular insulin
2. additionally enter 10% longer-acting insulin
3. before each meal in addition to enter 20% of the daily dose of insulin short

156. Maximum hypoglycemic effect of insulin is shown through simple:
1. 1.5 - 3 hours
2. 4 - 8 hours
3. 1 - 1.5 hours

157. List the symptoms of ketoacidosis:
1. Dehydration

2. shortness of breath
3. pale skin
4. hypotension
5. abdominal pain

158. In response to hypoglycemia cortisol ...
1.enhances hepatic gluconeogenesis
2. inhibits hepatic gluconeogenesis
3. enhances the utilization of glucose by muscles
4. inhibits glucose utilization by muscles

159. What are the specific risk factors for coronary artery disease in patients with diabetes mellitus:
1. hyperglycemia
2. hyperinsulinemia
3. hemostatic disorders (quick clot)
4. diabetic nephropathy
5. lack of exercise

160. What are the external manifestations of ischemic forms of diabetic foot:
1. pale skin, cyanotic
2. pale skin or normal color
3. feet cold
4. foot warmer
5. reduced sensitivity
6. retained sensitivity

161. The level of serum insulin is most often:
1. significantly reduced in type 1 diabetes;
2. increased in the early stages of type 2 diabetes;
3. reduced in phase I-stimulated secretion in type 2 diabetes;
4. increased after stimulation of glucose in diabetes mellitus type 1.

162. In 95% excreted through the gastrointestinal tract, and not through the kidneys following sulfonylurea drug:
1. gliclazide;

2. glyburide;
3. glikvidon;
4. repagliinid.

163. Side effects of metformin include:
1. lactic acidosis;
2. allergic skin reactions;
3. dyspeptic reaction at the beginning of therapy;
4. hypoglycemic reactions;
5. increased appetite.

164. The most characteristic changes in lipid metabolism in diabetes mellitus:
1. increase in total cholesterol;
2. elevated triglycerides;
3. increasing the level of LDL (low density lipoprotein);
4. reduction in free fatty acids;
5. lowering of HDL (high density lipoprotein);

165. Under what physiological conditions increased demand for glucose:
1. physical activity
2. prolonged fasting
3. some serious diseases

166. What is the amount of insulin necessary to assign a patient with type 1 diabetes with the initial selection of doses:
1. 0.7 - 0.8 U / kg / day
2. 1.0 U / kg / day
3. 2, 0 U / kg / day
4. 2 U / hr

167. What are the most frequent changes in the oral cavity in decompensated diabetes:
1. The burning of the mouth
2. reduction in taste sensitivity
3. periodontal
4. gingivitis, stomatitis

5. hypoplasia of the maxillary and mandibular

168. With morbid obesity (BMI 40) in a patient with diabetes, what should be the daily calorie intake:
1. physiological diet
2. calories should be increased by 10%
3. calories should be reduced by 20 - 30%
4. advisable to appoint dosed fasting
5. subcalorie diet with reduced fat and simple carbohydrates

169. What are the main etiopathogenic links of type 1 diabetes:
1. genetic predisposition
2. the destruction of beta cells autoimmune
3. viral infections
4. toxic effects of chemicals on the beta cells
5. fibrosis of the pancreas

170. What is the risk of children getting sick with diabetes, if one parent is sick:
1. if the mother is ill - 5%
2. If the father is ill - 6%
3. If the patient's mother - 10%
4. if the father is sick - 12%

171. What allele HLA system are more common in patients with type 1 diabetes?
1. HLA-DR2
2. HLA-DR3
3. HLA-DR4
4. HLA-DR5

172. In some cases, may not be antibodies to beta-cells in patients with newly diagnosed type 1 diabetes:
1. in individuals in the preclinical stage of the disease
2. If the death of all the beta cells
3. if the diabetes is caused by an acute viral infection
4. if the diabetes is caused by exposure to toxic substances

173. Which is preferable to use products with diabetes:
1. low-fat milk
2. no more than 2-3 eggs a week
3. butter
4. margarine
5. pork, lamb
6. poultry, fish

174. What are the signs of diabetic neuropathy:
1. thickening and dryness
2. Violation of little fingers extension
3. loss of fingers and hands
4.paresthesia
5. loss of fingers, hands and other joints

175. What causes hyperglycemia Daybreak?
1. lack of basal insulin
2. increased destruction of insulin in the liver in the early morning hours
3. Somogyi syndrome
4. increased secretion of growth hormone

176. What are the main task of diet in type 2 diabetes with obesity:
1. create conditions for normal physical development
2. strive to achieve a healthy weight
3. balanced diet

177. Call preparations increasing sulfonylurea hypoglycemic activity of derivatives:
1. salicylate
2. clofibrate
3. MAO inhibitors
4. beta-blockers
5. nicotinic acid
6. L-thyroxine

178. drugs with hyperglycemic activity:

1. L-thyroxine
2. Beta-blockers
3. Diuretics
4. estrogens
5. indomethacin
6. clofibrate

179. List the stages of diabetic nephropathy according to the classification (by Mogensen):
1. the initial stage of structural change
2. severe nephropathy
3. preclinical changes
4. kidney hyperfunction
5. starting nephropathy
6. uremia

180. What indicators characterize microalbuminuria, urinary albumin:
1.10 - 30 mg / day
2. 30 - 300 mg / day
3. 300 - 500 mg / day
4. 20 - 200 mg / l
5. more than 200 mg / l

181. What form of diabetic retinopathy according to the classification and E.Kohner M.Porta:
1. nonproliferative retinopathy
2. starting retinopathy
3. pre proliferative retinopathy
4. complicated by retinopathy
5. proliferative retinopathy

182. What is the reason of diabetic foot syndrome?
1. peripheral neuropathy
2. radiculopathy
3. macroangiopathy
4. osteoarthropathy
5. myopathy

6 ulcerative lesions

183. What should the physician do in the so-called labile type 1 diabetes?
1. identify technical errors for analyzes
2. identify intercurrent diseases
3. to help solve social and psychological problems
4. recommend treatment in a hospital

184. What insulins can be mixed in the same syringe?
1. acidic insulin
2. insulins one firm
3. short-acting insulin and NPH insulin
4. Actrapid and Monotard

185. What amount of short-acting insulin to with 20 units of Aktrofan in 30/70?
1. 12 units
2. 6 units
3. 14 units
4. 5 units

186. Which of these products containing 1 bread units:
1. 100g cream
2. 1 tbsp sugar
3. 3 large carrots
4. 1 large beet
5. 250 ml milk

187. What is the maximum number of bread unit in one meal?
1. 10 BU
2. 7 BU
3. 5 BU
4. 12 BU

188. Which of these products containing 100 calories:
1. 1 teaspoon vegetable oil
2. 1.5 tsp butter

3. 1.5 tsp mayonnaise
4. 1 tbsp nuts

189. In some cases, patients with type 2 diabetes may ketonemia and ketonuria?
1. during stress
2. during infection

190. What are the reasons for the loss of sensitivity to sulfonylurea derivatives:
1. desensitization of potassium channels
2. the destruction of beta cells
3. receiving salicylates

191. List the criteria for good compensation of lipid metabolism in patients with type 2 diabetes:
1. total cholesterol less than 4.5 mmol / L
2. Total cholesterol less than 6.5 mmol / L
3. triglycerides less than 1.7 mmol / L
4. triglycerides less than 2.2 mmol / L
5. HDL cholesterol greater than 1.0 mmol / l in men
6. cholesterol greater than 1.2 mmol / l in women

192. Chronic insulin overdose clinically:
1. labile of diabetes;
2. frequent hypoglycemic reactions;
3. weight gain;
4. weight loss;
5. dry skin.

193. Biguanides promote:
1. overcome insulin resistance;
2 .improve the transport of glucose into the cell;
3. inhibition of hepatic gluconeogenesis;
4. reduction of glycogenesis and glycolysis;
5. preprandial increase glucose by 30%.

194. In the treatment of acute myocardial infarction in patients with type 2 diabetes receiving sulfonamides, with glucose above 16 mmol / l appoint:

1. sulfanilamide sdrug from another group;
2. combination therapy: low dose short insulin injections of 2-4 and 1-2 tablets sulfa drugs;
3. combination therapy with insulin and biguanides;
4. small doses of regular insulin injections at 3-4;
5. biguanides.

195. What most of these diets is shown to the patient in a state of diabetic ketoacidosis?

1. physiological
2. broad carbohydrate
3. diet with reduced fat from carbohydrates
4. diet with reduced fat and carbohydrates
5. subcalorie diet

196. Which of the glucose-lowering drugs are indicated for the treatment of Mauriac syndrome in children:

1. short-acting insulin
2. biguanides
3. sulfa drugs in combination with insulin

197. Etiologic agent of lactate acidosis coma in diabetic patients are:

1. treatment of biguanides;
2. myocardial infarction;
3. hypoxia caused by anemia, shock, bleeding;
4. sulphonamide treatment;
5. peptic ulcer disease.

198. The risk of developing type 2 diabetes is elevated in:

1. people often ill viral infections;
2. women who delivered a baby weighing more than 4.5 kg;
3. people under the age of one year treated cow's milk;
4. obese people

199. Most dangerous manifestation of diabetic cardiomyopathy

independently:
1. unstable tachycardia;
2. silent myocardial ischemia;
3. fixed heart rate;
4. orthostatic hypotension;
5. constant tachycardia.

200. In type 2 diabetes, the first inspection of the fundus should be carried out:
1. not later than 2 years after diagnosis;
2. all patients - immediately after discovery of type 2 diabetes;
3. not later than 1 year after diagnosis;
4. in individuals with high blood pressure - after detection of type 2 diabetes, the remaining patients - not later than 2 years after diagnosis.