

Diabetes mellitus

1. Diabetes: definition, classification, diagnostic criteria for diabetes.
2. Diabetes: the methodology and interpretation of OGTT, the notion of prediabetes.
3. Diabetes: changes in carbohydrate, lipid, protein and hydrosaline metabolism.
4. Diabetes mellitus - endocrine pancreas: the structure of Langerhans islands: secreted hormones.
5. Diabetes: the biological effects of insulin in healthy people
6. Type 1 diabetes: etiology, pathogenesis.
7. Type 1 diabetes: onset of clinical manifestations and investigations necessary to confirm the type of diabetes
8. Type 2 diabetes: etiology, pathogenesis.
9. Diabetes mellitus type 2: characteristic onset, clinical manifestations and examination plan of type 2 diabetes mellitus patient at the diagnosis moment.
10. Type 2 diabetes: risk factors, early diagnosis.
11. Secondary diabetes (other types of diabetes): classification, pathogenesis.
12. Differential diagnosis between diabetes mellitus type 1 and type 2.
13. Classification of diabetes complications ; pathogenetic mechanisms involved in the development of chronic complications.
14. Diabetic retinopathy: classification, etiopathogenesis, diagnosis.
15. Non-proliferative diabetic retinopathy.
16. Proliferative diabetic retinopathy.
17. Diabetic nephropathy (diabetic renal disease): classification, etiology.
18. Diabetic nephropathy (diabetic kidney disease): diagnosis and treatment.
19. Symmetrical distal sensory polyneuropathy: clinical presentation, methods of diagnosis and treatment.
20. Diabetic vegetative neuropathy (autonomous): classification and clinical manifestations.
21. Angiopathy of the lower limbs (peripheral arterial disease): complaints, clinical manifestations, diagnostic methods.
22. Cardiovascular changes in diabetes. Etiopathogenesis, clinical manifestations.
23. Heart damage in people with diabetes. Particularities of myocardial infarction in diabetics.
24. Diabetic foot: classification of clinical forms, clinical manifestations.
25. Diabetic foot: differentiating the ischemic form from the neuropathic form.
26. Skin changes in diabetes, pathogenesis.
27. Osteoarticular changes in diabetes, Charcot osteoarthropathy.
28. Digestive tract changes in diabetes mellitus.
29. Mauriac syndrome: definition, etiology, clinical manifestations.
30. Acute complications of diabetes mellitus. Classification. Hypoglycemia – definition, predisposing factors.
31. Hypoglycemia and hypoglycemic coma: clinical manifestations: neuroglycopenic and adrenergic signs.
32. Hypoglycemia and hypoglycemic coma: diagnosis and treatment.

33. Ketoacidosis and ketoacidotic coma: definition, predisposing factors and pathogenesis.
34. Ketoacidosis and ketoacidotic coma: clinical manifestations, diagnosis and treatment.
35. Differential diagnosis between hypoglycemic coma and ketoacidosis.
36. Hyperglycemic hyperosmolar state: etiology, pathogenesis, clinical manifestations.
37. Hyperglycemic hyperosmolar state: clinical manifestations and diagnostic, treatment.
38. Lactic acidosis: etiopathogenesis, clinical manifestations, laboratory diagnosis and treatment principles.
39. Differential diagnosis between the hyperosmolar hyperglycemic coma and ketoacidosis.
40. Principles of diet in type 1 diabetes: calculating the energy value of "bread units". Distribution of meals in case of administration of fast-acting insulin.
41. Principles of diet in type 2 diabetes, herbal remedies, edulcorantele.
42. Diet of a diabetic patient: calculating caloric needs.
43. Insulin preparations, classification, action curves.
44. Side effects of insulin therapy.
45. Morning hyperglycemia: causes, clinical features, paraclinical confirmation and methods of their correction.
46. Somogy effect and the dawn phenomenon: manifestations, diagnosis and treatment.
47. Principles for the treatment of type 2 diabetes.
48. Classification of antidiabetic drugs after the site of action in the pathogenesis of diabetes mellitus type 2.
49. Biguanides: drugs, mechanism of action, indications, contraindications and adverse effects.
50. Sulfanylureas derivatives: drugs, mechanism of action, indications, contraindications and adverse effects.
51. Incretins (DPP4 inhibitors and GLP1 receptor agonists): drugs, mechanism of action, indications, contraindications and adverse effects.
52. SGLT2 inhibitors: drugs, mechanism of action, indications, contraindications and adverse effects.
53. Meglitinides: drugs, mechanism of action, indications, contraindications and adverse effects.
54. Alpha- glucosidase inhibitors: drugs, mechanism of action, indications, contraindications and side effects.

Thyroid

55. Thyroid hormones: biological effects and mechanisms of thyroid function regulation.
56. Palpation of the thyroid gland: degrees of enlargement of the thyroid gland; laboratory and instrumental methods used in thyroid gland pathologies.
57. Diffuse toxic goiter: definition, etiopathogenesis, triggers.
58. Diffuse toxic goiter: complaints and physical examination results.
59. Diffuse toxic goiter: manifestations of the respiratory and cardiovascular system.
60. Diffuse toxic goiter: neuropsychic and digestive manifestations.
61. Diffuse toxic goiter: urogenital implications, endocrine disorders.
62. Diffuse toxic goiter: ocular signs, pathogenesis and clinical appearance.

63. Diffuse toxic goiter: pretibial myxedema: definition, etiopathogenesis, clinical manifestations and treatment.
64. Diffuse toxic goiter: laboratory and instrumental diagnosis.
65. Diffuse toxic goiter: principles and methods of treatment.
66. Diffuse toxic goiter: indications, contraindications and principles of drug therapy.
67. Diffuse toxic goiter: indications, contraindications and complications of surgical treatment.
68. Diffuse toxic goiter: indications, contraindications and complications of radioactive iodine treatment.
69. Endocrine ophthalmopathy: definition, etiopathogenesis, classification, clinical manifestations.
70. Endocrine ophthalmopathy: clinical manifestations, diagnosis and treatment principles.
71. Thyrotoxic crisis: definition, risk factors, etiopathogenesis, clinical manifestations.
72. Thyrotoxic crisis: clinical manifestations, diagnosis and treatment principles.
73. Thyrotoxic adenoma: definition, etiopathogenesis, clinical manifestations.
74. Thyrotoxic adenoma: clinical manifestations, diagnosis and treatment principles.
75. Hypothyroidism: definition, classification, etiopathogenesis, diagnosis.
76. Hypothyroidism: complaints and physical examination data.
77. Hypothyroidism: neuropsychic, respiratory and cardiovascular manifestations.
78. Hypothyroidism: digestive, urogenital and endocrine manifestations.
79. Hypothyroidism: laboratory and instrumental diagnosis.
80. Hypothyroidism: principles of treatment.
81. Hypothyroid coma: definition, risk factors, etiopathogenesis.
82. Hypothyroid coma: clinical manifestations, the principle of diagnosis and treatment.
83. Thyroiditis: classification and differential diagnosis.
84. Autoimmune thyroiditis: definition, classification, etiopathogenesis, clinical manifestations
85. Autoimmune thyroiditis: clinical manifestations, paraclinical diagnosis and principles of treatment.
86. Subacute thyroiditis: etiopathogenesis, accusations, clinical manifestations.
87. Subacute thyroiditis: clinical manifestations, diagnosis and treatment.
88. Acute thyroiditis: etiopathogenesis, clinical manifestations, diagnosis and treatment.
89. Fibrous thyroiditis: etiopathogenesis, clinical manifestations, diagnosis and treatment.
90. Nodular goiter: definition, etiology, clinical manifestations diagnosis and treatment.
91. Endemic goiter: definition, etiopathogenesis, normal iodine intake depending on age.
92. Endemic goiter: clinical manifestations, diagnosis and treatment.
93. Congenital hypothyroidism: definition, etiopathogenesis, clinical manifestations.
94. Congenital hypothyroidism: clinical manifestations, diagnosis and treatment.
95. Treatment of hypothyroidism: drugs, principles of therapy and criteria for compensating hypothyroidism in different age groups.

Pituitary gland.

96. Hypothalamus: structure, hormones secreted in the hypothalamic nuclei and their effects, the hypothalamic-pituitary port system.
97. Pituitary gland: structure, pituitary hormones and their physiological effects.
98. Pituitary gland: investigation methods used in hypothalamic-pituitary pathology (laboratory and instrumental, functional tests).
99. Growth hormone: physiological effects and regulation of secretion.
100. Acromegaly: definition, etiology.
101. Acromegaly: complaints and physical examination data.
102. Acromegaly: tumoral syndrome: causes and characteristic manifestations.
103. Acromegaly: endocrine-metabolic syndrome: mechanisms of occurrence and clinical manifestations.
104. Acromegaly: changes in the respiratory and cardiovascular systems.
105. Acromegaly: changes in the digestive, urogenital and endocrine systems.
106. Acromegaly: laboratory and instrumental diagnosis.
107. Acromegaly: methods and principles of treatment.
108. Gigantism: definition, etiopathogenesis, clinical manifestations.
109. Gigantism: clinical manifestations, positive diagnosis and the principle of treatment.
110. Acromegaly and gigantism: differential diagnosis.
111. Hyperprolactinemia: definition, classification, physiological effects of prolactin and regulation of its secretion.
112. Prolactinoma: definition, etiology, pathogenesis, clinical manifestations.
113. Prolactinoma: clinical manifestations, diagnosis and treatment.
114. Diabetes insipidus: definition, classification, etiopathogenesis, physiological effects of vasopressin.
115. Diabetes insipidus: classification, clinical manifestations.
116. Diabetes insipidus: water restriction test and Vasopressin test.
117. Diabetes insipidus paraclinical diagnosis and treatment principles.
118. Pituitary dwarfism: definition, etiopathogenesis, classification.
119. Pituitary dwarfism: complaints and physical examination data.
120. Pituitary dwarfism: clinical manifestations of the cardiovascular, digestive, urogenital system.
121. Pituitary dwarfism: laboratory and instrumental diagnosis
122. Pituitary dwarfism: functional tests of stimulation and differential diagnosis.
123. Pituitary dwarfism, pure form: clinical manifestations and treatment.
124. Pituitary dwarfism with hypothyroidism: clinical manifestations and treatment principles.
125. Pituitary dwarfism with hypogonadism: clinical manifestations and treatment.
126. Adiposogenital dystrophy: definition, etiopathogenesis clinical manifestations.
127. Adiposogenital dystrophy: clinical manifestations, paraclinical diagnosis and treatment principles.
128. Adenohypophyseal insufficiency: definition, etiopathogenesis, classification.

129. Sheehan syndrome, Simmonds: definition, etiopathogenesis, clinical manifestations.
130. Pituitary gland: Adenohypophyseal insufficiency with TSH deficiency: clinical manifestations, positive laboratory diagnosis.
131. Pituitary gland: Adenohypophyseal insufficiency with STH deficiency: clinical manifestations, positive laboratory diagnosis.
132. ACTH-deficient adenohypophyseal insufficiency: clinical manifestations and positive laboratory diagnosis.
133. Adenohypophyseal insufficiency with FSH and LH deficiency: clinical manifestations and positive laboratory diagnosis.
134. Adenohypophyseal insufficiency: laboratory diagnosis and treatment principle.
135. Inadequate ADH secretion syndrome: definition, etiology, clinical manifestations.
136. Inadequate ADH secretion syndrome: clinical manifestations, paraclinical diagnosis and treatment principles.
137. Craniopharyngioma: definition, manifestations of paraclinical diagnosis and principles of treatment.
138. Cushing's disease: definition, etiology, pathogenesis.
139. Cushing's disease: skin, muscle and bone changes.
140. Cushing's disease: pulmonary and cardiac changes.
141. Cushing's disease: digestive, renal changes.
142. Cushing's disease: neuropsychic and endocrine changes.
143. Cushing's disease: laboratory diagnosis: dexamethasone suppression test.
144. Cushing's disease: instrumental diagnosis.
145. Cushing's disease: principles of treatment

Adrenal

146. Adrenals: the structure of the adrenal glands, the hormones secreted by the adrenal glands.
147. Adrenals: the biological effects of glucocorticoids and the mechanisms of secretion regulation.
148. Adrenals: the biological effects of adrenal aldosterone and androgens and the mechanisms of regulation of their secretion.
149. Adrenals: catecholamines biological effects.
150. Hypercorticism syndrome: definition, classification, etiology.
151. Hypercorticism syndrome: laboratory confirmation, dexamethasone suppression test (low dose and high dose test methodology and interpretation).
152. Cushing's syndrome: the onset of the disease, complaints and physical examination data.
153. Cushing's syndrome: skin, osteoarticular and muscular changes.
154. Cushing's syndrome: cardiovascular, digestive, and renal changes.
155. Cushing's syndrome: laboratory and instrumental investigations to confirm the diagnosis.
156. Differential diagnosis between different clinical forms of hypercorticism.
157. Cushing's syndrome treatment principles.
158. Primary hyperaldosteronism: definition, etiopathogenesis.

- 159. Primary hyperaldosteronism: clinical manifestations.
- 160. Primary hyperaldosteronism: laboratory diagnosis, functional tests.
- 161. Primary hyperaldosteronism: instrumental diagnosis and treatment principles.
- 162. Pheochromocytoma: definition, etiopathogenesis, classification.
- 163. Pheochromocytoma: complaints and clinical manifestations.
- 164. Pheochromocytoma: clinical forms, catecholamine paroxysm, complications.
- 165. Pheochromocytoma: laboratory and instrumental diagnosis: treatment principles.
- 166. Addison's disease: definition, etiopathogenesis, complaints.
- 167. Addison's disease: complaints, the patient's appearance.
- 168. Addison's disease: pulmonary and cardiovascular clinical manifestations.
- 169. Addison's disease: digestive and renal clinical manifestations.
- 170. Addison's disease: paraclinical diagnosis and treatment principles.
- 171. Acute adrenal insufficiency: definition, etiopathogenesis, clinical manifestations.
- 172. Acute adrenal insufficiency: clinical manifestations, paraclinical investigations and emergency treatment.
- 173. Congenital adrenal hyperplasia: definition, etiopathogenesis, classification.
- 174. Congenital hyperplasia of the adrenal glands with 21-hydroxylase deficiency: clinical manifestations, diagnosis and treatment.
- 175. Congenital hyperplasia of adrenal deficits with 11-hydroxylase: clinical manifestations, diagnosis and treatment.

Gonads

- 176. Testes: structure, testosterone and physiological effects mechanisms of regulation of its secretion.
- 177. Testes: methods of investigation used for diagnosis.
- 178. Male hypogonadism: definition, etiology, classification.
- 179. Prepubertal and postpubertal male hypogonadism: causes, clinical manifestations, differential diagnosis.
- 180. Primary and secondary male hypogonadism: causes, clinical manifestations, differential diagnosis.
- 181. Male hypogonadism: principles of treatment.
- 182. Ovary: structure, hormones and their effects, regulation of the menstrual cycle.
- 183. Ovary: methods of investigation of ovarian function.
- 184. Female hypogonadism: definition, etiology, classification.
- 185. Prepubertal and postpubertal female hypogonadism: causes, clinical manifestations, differential diagnosis.
- 186. Primary and secondary female hypogonadism: causes, clinical manifestations, differential diagnosis.
- 187. Female hypogonadism: principles of treatment.
- 188. Klinefelter syndrome: definition, etiology, clinical manifestations.

189. Klinefelter's syndrome: clinical manifestations, paraclinical diagnosis and treatment principles.
190. Turner syndrome: definition, etiology, clinical manifestations.
191. Turner syndrome: clinical manifestations, paraclinical diagnosis and the principle of treatment.
192. Cryptorchidism: definition, classification, etiopathogenesis.
193. Cryptorchidism: clinical manifestations, positive diagnosis and principle of treatment.
194. Polycystic ovary syndrome: definition, etiopathogenesis, clinical manifestations.
195. Polycystic ovary syndrome: clinical manifestations, diagnosis and treatment principles.
196. Menopause: definition, classification, clinical manifestations, diagnosis and treatment.

Parathyroids.

197. Ca-P metabolism: parathyroid hormone, calcitonin: physiological effects.
198. Hyperparathyroidism: definition, etiopathogenesis, classification.
199. Hyperparathyroidism: clinical manifestations, laboratory diagnosis.
200. Hyperparathyroidism: treatment principles, emergency help in hyperparathyroid crisis.
201. Hypoparathyroidism: definition, etiopathogenesis, clinical forms.
202. Chronic hypoparathyroidism clinical manifestations, diagnosis and treatment.
203. Acute hypoparathyroidism: clinical manifestations, diagnosis and emergency treatment.

Obesity.

204. Definition, etiology, classification.
205. BMI calculation, interpretation of its values.
206. Clinical manifestation and laboratory diagnosis.
207. Differential diagnosis and treatment principles.