Diabetes mellitus

2. Diabetes: the methodology and interpretation of OGTT, the notion of prediabetes.
3. Diabetes: changes in carbohydrate, lipid, protein and hydrosaline metabolism.
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.
10. Type 2 diabetes: risk factors, early diagnosis.
12. Differential diagnosis between diabetes mellitus type 1 and type 2.
21. Angiopathy of the lower limbs (peripheral arterial disease): complaints, clinical manifestations, diagnostic methods.
25. Diabetic foot: differentiating the ischemic form from the neuropathic form.
26. Skin changes in diabetes, pathogenesis.
27. Osteoarticular changes in diabetes, Charcot osteoarthropathy.
31. Hypoglicemia and hypoglycemic coma: clinical manifestations: neuroglicopenic and adrenergic signs.
33. Ketoacidosis and ketoacidotic coma: definition, predisposing factors and pathogenesis.
35. Differential diagnosis between hypoglycemic coma and ketoacidosis.
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.
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.
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.
64. Diffuse toxic goiter: laboratory and instrumental diagnosis.
66. Diffuse toxic goiter: indications, contraindications and principles of drug therapy.
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.
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.
89. Fibrous thyroiditis: etiopathogenesis, clinical manifestations, diagnosis and treatment.
91. Endemic goiter: definition, etiopathogenesis, normal iodine intake depending on age.
93. Congenital hypothyroidism: definition, etiopathogenesis, clinical manifestations.
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).
100. Acromegaly: definition, etiology.
101. Acromegaly: complaints and physical examination data.
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.
108. Gigantism: definition, etiopathogenesis, clinical manifestations.
111. Hyperprolactinemia: definition, classification, physiological effects of prolactin and regulation of its secretion.
112. Prolactinoma: definition, etiology, pathogenesis, clinical manifestations.
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
124. Pituitary dwarfism with hypothyroidism: clinical manifestations and treatment principles.
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.
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.
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.
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.
155. Cushing's syndrome: laboratory and instrumental investigations to confirm the diagnosis.
156. Differential diagnosis between different clinical forms of hypercorticism.
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. Adisson's disease: definition, etiopathogenesis, complaints.
167. Adisson's disease: complaints, the patient's appearance.
169. Adisson's disease: digestive and renal clinical manifestations.
170. Adisson's disease: paraclinical diagnosis and treatment principles.
171. Acute adrenal insufficiency: definition, etiopathogenesis, clinical manifestations.

Gonads

176. Testes: structure, testosterone and physiological effects mechanisms of regulation of its secretion.
177. Testes: methods of investigation used for diagnosis.
179. Prepubertal and postpubertal male hypogonadism: causes, clinical manifestations, differential diagnosis.
180. Primary and secondary male hypogonadism: causes, clinical manifestations, differential diagnosis.
182. Ovary: structure, hormones and their effects, regulation of the menstrual cycle.
184. Female hypogonadism: definition, etiology, classification.
186. Primary and secondary female hypogonadism: causes, clinical manifestations, differential diagnosis.
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.
194. Polycystic ovary syndrome: definition, etiopathogenesis, clinical manifestations.

**Parathyroids.**

197. Ca-P metabolism: parathyroid hormone, calcitonin: physiological effects.
198. Hyperparathyroidism: definition, etiopathogenesis, classification.
199. Hyperparathyroidism: clinical manifestations, laboratory diagnosis.
201. Hypoparathyroidism: definition, etiopathogenesis, clinical forms.

**Obesity.**

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