

**Thematic plan of the practical training in endocrinology  
for 5-year students of Faculty of General Medicine  
(2020-2021 academic year)**

**Theme № 1. Diabetes mellitus. The etiopathogenesis, classification, clinical manifestations, complications, early diagnosis**

**Academic questions**

1. The definition of diabetes mellitus.
2. The absolute, relative, absolute-relative insulin deficiency.
3. Diabetes mellitus type 1 and 2: the etiology, pathogenesis, clinical manifestations.
4. The mechanism of hyperglycemia.
5. WHO classification.
6. The methods of diagnosis of disorders of carbohydrate metabolism.
7. The main complications of diabetes mellitus.

**Theme № 2. The basis of a treatment of diabetes mellitus**

**Academic questions**

1. The concept of "compensation" of diabetes mellitus.
2. The principles of the diet in patients with diabetes mellitus.
3. Insulin therapy.
4. The calculation of the daily insulin dose and its distribution on the 2, 3, 4 or 5 injections.
5. Basic principles of a conversion from short-acting insulin to insulin with a prolonged action.
6. Tableted hypoglycemic therapy, mechanism of action.
7. Therapeutic indications. Contraindications. Complications.

**Theme № 3. Diabetic coma**

**Academic questions**

1. The etiology, pathogenesis of a hyperglycemic coma, ketoacidotic coma.
2. The diagnosis, differential diagnosis with a hypoglycemic coma.
3. The stages of a hyperglycemic coma, ketoacidotic coma.
4. The differentiated approach to the treatment of ketoacidosis (stage 1), precoma and coma (stage 2-3).
5. The treatment of a hyperglycemic coma by low doses of insulin.
6. The role of symptomatic therapy for removing the patient from a comatose state.
7. Features of clinic and treatment of hyperosmolar and hypoglycemia coma.

**Theme № 4. The syndrome of thyrotoxicosis. The syndrome of hypothyroidism. Iodine deficiency diseases. Inflammatory diseases of the thyroid gland**

**Academic questions**

1. The methods of investigation of a thyroid gland.
2. Classification of thyroid diseases.
3. Etiology and pathogenesis of Graves' disease.
4. Clinical manifestations of hyperthyroidism, differential diagnosis, treatment.
5. Primary and secondary hypothyroidism. The role of autoimmune processes in the pathogenesis.
6. The diagnosis and differential diagnosis of hypothyroidism. Treatment.
7. Endemic and sporadic goiter. Causes, mechanism of occurrence, clinical manifestations, differential diagnosis, treatment. Prevention of endemic goiter: mass, group, individual.
8. Acute thyroiditis. Subacute thyroiditis: etiology, pathogenesis, clinical symptoms, diagnosis, treatment.
9. Riedel's thyroiditis: etiology, pathogenesis, clinical symptoms, diagnosis, treatment.
10. Hashimoto's thyroiditis: etiology, pathogenesis, clinical symptoms, diagnosis, treatment.

**Theme № 5. Diseases of the adrenal glands. Hypercorticism syndrome. Hypocorticism syndrome**

**Academic questions**

1. The mechanism of action of glucocorticoids in the protein, fat, carbohydrate and mineral metabolism.
2. Etiology and pathogenesis of hypercorticism.
3. The main clinical manifestations of hypercorticism, diagnosis, differential diagnosis.
4. Treatment of hypercorticism.
5. Etiology and pathogenesis of acute and chronic adrenal insufficiency.
6. Classification of the form and severity of adrenal insufficiency.
7. Clinical manifestations of hypocorticism, diagnosis, differential diagnosis.
8. Treatment of chronic adrenal insufficiency.
9. Causes and clinical manifestations of Addison's crisis, treatment.
10. Pheochromocytoma.
11. Hyperaldosteronism.