### Thematic plan of the practical training in endocrinology for 5-year students of Faculty of General Medicine (2017-2018 academic year)

## Theme № 1. Diabetes mellitus. The etiopathogenesis, classification, clinical manifestations, complications, early diagnosis, differential 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 clinical forms.
- 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. Sulfonylureas and biguanides derivatives, mechanism of action.
- 7. Therapeutic indications. Contraindications. Complications.

#### Theme № 3. Diabetic coma

#### **Academic questions**

- 1. The etiology, pathogenesis of a hyperglycemic coma.
- 2. The diagnosis, differential diagnosis with a hypoglycemic coma.
- 3. The stages of a hyperglycemic 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 hypoglycemia and hyperosmolar coma.

# Theme $N_2$ 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.
- 6. The role of autoimmune processes in the pathogenesis of hypothyroidism.
- 7. The diagnosis and differential diagnosis of hypothyroidism. Treatment.
- 8. Endemic and sporadic goiter. Causes, mechanism of occurrence, clinical manifestations, differential diagnosis, treatment. Prevention of endemic goiter: mass, group, individual.
- 9. Acute thyroiditis: etiology, pathogenesis, clinical symptoms, diagnosis, treatment. Subacute thyroiditis: etiology, pathogenesis, clinical symptoms, diagnosis, treatment.
  - 10. Riedel's thyroiditis: etiology, pathogenesis, clinical symptoms, diagnosis, treatment.
  - 11. Hashimoto's thyroiditis: etiology, pathogenesis, clinical symptoms, diagnosis, treatment.

## № 5. Diseases of the adrenal glands. Hypercorticoidism syndrome. Hypocorticoidism syndrome Academic questions

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

Заведующий 1-ой кафедрой внутренних болезней, профессор