Thematic plan of the practical training in endocrinology

for 6-year students of Faculty of foreign students profile "General Practice" (2022-2023 academic year)

Theme 1. Diabetes mellitus. Differential diagnosis of various types of diabetes mellitus. Emergency conditions for diabetes mellitus

- 1. Diabetes mellitus type 1 and 2. Social and medical importance of this.
- 2. The role of obesity and insulin resistance in development of diabetes mellitus type 2.
- 3. Modern principles of diagnosis of disorders of carbohydrate metabolism.
- 4. Gestational diabetes: criteria for diagnosis, principles of treatment and management of pregnancy. Pregnancy in diabetes mellitus
- 5. Late complications of diabetes mellitus: diabetic micro- and macroangiopathies. Classification, basic methods of diagnosis and treatment.
- 6. Prevention of diabetes and its acute and chronic complications.
- 7. Differential diagnosis and distinctive features of emergency medical care in diabetic coma (ketoacidotic, hyperosmolar and lactacidemic).
- 8. Hypoglycemia: diagnostics, methods of emergency medical care.

Theme 2. Complex treatment of diabetes mellitus with evidence-based medicine

- 1. Modern algorithm for management of patients with diabetes mellitus type 2.
- 2. The principle of multi-factor correction of diabetes mellitus type 2.
- 3. Criteria for the effective treatment of diabetes mellitus type 2.
- 4. New methods and medications in the treatment of diabetes mellitus and obesity.
- 5. The principles of management of patients with somatic diseases in diabetes mellitus.
- 6. Monitoring of diabetes mellitus in an outpatient setting and self-monitoring at home.
- 7. Features of the course of diabetes mellitus in inflammatory diseases. Management of patients with diabetes mellitus and coronavirus infection (COVID-19).

Theme 3. Diseases of the thyroid gland and parathyroid glands

- 1. Features of the course of diabetes mellitus in inflammatory diseases. Management of patients with diabetes mellitus and coronavirus infection (COVID-19).
- 2. Nodal thyroid pathology: definition, causes, clinical manifestations, stages of examination and a differentiated management of patients.
- 3. Prevention of iodine deficiency diseases and the state of the problem in Belarus.
- 4. Primary hyperparathyroidism: causes, clinical manifestations, diagnosis and treatment.
- 5. Hypothyroidism: classification, diagnosis, differential diagnosis and treatment principles.
- 6. Hyperthyroidism: classification, differential diagnosis, treatment. Subclinical hyperthyroidism: monitoring, management of patients.
- 7. Determination of the treatment of Graves' disease and toxic adenoma.

Theme 4. Diseases of the adrenal glands

- 1. Acute adrenal insufficiency. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
- 2. Adrenal crisis. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
- 3. Primary hyperaldosteronism (Conn's syndrome): the mechanism of development, clinical picture. Diagnosis.
- 4. Differential diagnosis of primary and secondary hyperaldosteronism.
- 5. Pheochromocytoma. Etiopathogenesis. Diagnosis. The main clinical forms. Treatment.
- 6. Hypercorticism (Cushing's disease and syndrome). Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment methods.
- 7. Differential diagnosis and treatment features of patients with endocrine arterial hypertension.

Theme 5. Diseases of the hypothalamic-pituitary system

- 1. Hierarchical organization in the neuroendocrine system. Hormones of peripheral endocrine glands. Pituitary. Hypothalamus. Central nervous system. Mutual relations of the nervous and endocrine system, the main ways of information transfer. Regulation of endocrine functions of the central nervous system.
- 2. Hypopituitary syndrome. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
- 3. Syndrome of inadequate secretion of antidiuretic hormone. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
- 4. Syndrome of tall stature and short stature. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
- 5. Somatotropinoma. Acromegaly. Gigantism. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
- 6. ACTH dependent Cushing's syndrome. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
- 7. Hyperprolactinaemia. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.
- 8. TTG producing adenoma of the pituitary gland. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment.

The head of the 1st department of

