**Background.** Type 2 diabetes mellitus (DM) has an intersecting underlying pathology with thyroid dysfunction. The literature is punctuated with evidence indicating a contribution of abnormalities of thyroid hormones to type 2 DM. The most probable mechanism leading to type 2 DM in thyroid dysfunction could be attributed to perturbed genetic expression of a constellation of genes along with physiological aberrations leading to impaired glucose utilization and disposal in muscles, overproduction of hepatic glucose output, and enhanced absorption of splanchnic glucose. These factors contribute to insulin resistance. Insulin resistance is also associated with thyroid dysfunction. Hypothyroidism has been associated with insulin resistance which has been reported to be the major cause of impaired glucose metabolism in type 2 DM. The aim of the study was to obtain the frequency of hypothyroidism in patients with type 2 DM and establishment of clinical features of type 2 DM motion in combination with hypothyroidism.

**Materials and methods.** The study was designed to see the prevalence of type 2 DM in hypothyroid patients of any etiology. 179 patients with DM in combination with a primary hypothyroidism, including 64 patients with type 1 DM and 115 patients with type 2 DM were under observation. Groups of comparison were 62 diabetes patients without hypothyroidism (27 with type 1 DM, 35 with type 2 DM). The functional state of thyroid gland was estimated by means of determination of basal concentrations of thyroid-stimulating hormone and free thyroxin. **Results.** It is set that patients with type 2 DM and hypothyroidism belonged to more senior age category, than patients with type 1 DM and hypothyroidism. Age in the group of patients with type 1 DM and hypothyroidism was 35.3 ± 9.5 years and in the group of patients with type 2 DM and hypothyroidism – 47.6 ± 11.0 years. In all groups of patients the percent of women was considerably higher than of men. Reliable differences are educed in relation to the index of glicemic amplitude, namely, his increase for type 1 DM patients with hypothyroidism. At combination of type 2 DM and hypothyroidism indexes of lipid metabolism were higher, than at type 2 DM without thyroid pathology. It confirms influence of hypothyroidism on lipid metabolism and
stipulates the increase the risk of cardiovascular complications progress at presence of two diseases. **Conclusions.** Among the inspected patients hypothyroidism occurred in 2.4 times more often among patients with type 2 DM than among patients with type 1 DM that testifies to the greater presence the risk of development of concomitant autoimmune pathology factors at the terms of metabolic violations in patients with type 2 DM. Insulin resistance and hyperinsulinemia, that is marked in patients with type 2 DM, assist proliferative processes, including in the thyroid tissue, and more senior age of type 2 DM patients assists progress of involutory changes and further development of thyroid hypofunction. The obligatory complex inspection of patients is recommended on type 2 DM in relation to the presence of concomitant thyroid pathology.

The author declares that she has no conflict of interests.