**Goal.** Provide data on the current classification, clinic, diagnosis, treatment of the multiple endocrine autoimmune syndromes.

**Introduction.** Multiple endocrine autoimmune syndromes are the actual problem of modern medicine as they combine the development of several endocrinopathies of autoimmune nature with non-endocrine autoimmune disorders in one patient. This syndrome leads to deterioration of quality of life and shortens the lives of such patients.

**Discussion.** Neufeld & Blizzard (1980) suggested a classification of APS, based on clinical criteria only, describing four main types. APS-1 is characterized by presence of chronic candidiasis, chronic hypoparathyroidism, Addison’s disease. It is a very rare syndrome interesting young subjects correlating to different mutations of AIRE gene on chromosome 21. APS-2 is characterized by presence of Addison’s disease (always present), autoimmune thyroid diseases and/or type 1 diabetes mellitus. It is a rare syndrome interesting particularly adult females and associated to a genetic pattern of HLA DR3/DR4. Autoimmune thyroid diseases associated to other autoimmune diseases (excluding Addison’s disease and/or hypoparathyroidism), are the main characteristics of APS-3. The different clinical combinations of autoimmune diseases not included in the previous groups are characteristics of APS-4.

In most types of APS disease occurs mostly in adulthood women. APS type 1 is characterized by the manifestation of symptoms in childhood, suffer more than men. APS type 1 is monogenic, autosomal recessive inheritance, in which there is a defect in AIRE gene in chromosome 21. Some researchers in patients with APS type 2 has been revealed abnormalities in chromosome 6. The exact localization of gene lesions for APS 3 and 4 types at present are not yet defined. It should be noted the presence of most types of APS proved or alleged polygenic type of inheritance, in some cases with incomplete penetrance. It is shown that most of the syndromes have association with HLA.

It should be noted that among non-endocrine components, mandatory feature of APS type 1 is mucocutaneous candidiasis. Other non-endocrine autoimmune diseases are a part of all types of APS such as vitiligo, alopecia areata, autoimmune gastritis, hepatitis, malabsorption, pernicious anemia, myasthenia gravis, lupus erythematosus systemic, rheumatoid arthritis, Sjogren's syndrome, scleroderma and others.

According to the classification suggested by C. Betterle et al. (2001), APS 3 is divided into 4 groups: 3-A subtype (autoimmune thyroid diseases and endocrine diseases ), 3-B subtype (autoimmune thyroid diseases and gastrointestinal lesions), 3-C subtype (autoimmune thyroid diseases and skin lesions, disorders of the hemopoietic system and the nervous system), 3-D subtype (autoimmune thyroid diseases with collagen diseases and vasculitis). However, according to the modern definition, multiple endocrine syndrome is an autoimmune disease that
involves two or more lesions of the endocrine organs in combination with other autoimmune diseases. Therefore, separation of APS type 3 as shown at the classification by C. Betterle et al., in our opinion, is not quite appropriate. In our view, APS type 3 should include 3-A subtype - autoimmune thyroiditis and autoimmune endocrine disease of the pancreas, 3-B, 3-C and 3-D subtypes - autoimmune thyroiditis in combination with other autoimmune endocrine syndromes. Combination of other autoimmune endocrine diseases with other autoimmune diseases non-endocrine, in our view, correct to include in a group of multiple autoimmune syndrome.

In recent years the study of APS has received a great impulse thanks to improved knowledge of autoimmune diseases and their natural history. This has allowed identifying patients with APS in the potential or subclinical phase and to start an early hormonal replacement treatment. Hormone therapy for each condition is similar to treatment that would be provided if the conditions occurred separately, except that treatment for adrenal insufficiency must be given before thyroid therapy is started when the conditions occur together.

The discovery of new autoantibodies correlated with clinical manifestations has allowed to understand the pathogenesis of such manifestations and to prepare new therapies. The discovery of new autoantibodies correlated with clinical manifestations has allowed to understand the pathogenesis of such manifestations and to prepare new therapies.

**Conclusion.** The review provides a comparative analysis of the 4 types of multiple endocrine autoimmune syndromes and up-to-date information about their classification, clinical picture, diagnostics and treatment.