

36. PATHOGENY OF DYSMETABOLISM IN GRAVES DISEASE

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Introduction. Thyroid dysfunction, especially Graves' disease, has a major impact on different levels of the components of the metabolic syndrome: hyperglycaemia, insulin resistance, high blood pressure and dyslipidemia. Also, a large number of pathophysiological manifestations remain to be discussed.

Aim of study. To summarize the available information on the action of excess thyroid hormones in the human body and to find convincing evidence to illustrate their major impact on the evolution of specific dysmetabolism.

Methods and materials. The study was realized on the basis of various researches and scientific materials (articles in journals, monographies and articles on the Internet, etc.) that refer to the description and observation of Graves' disease and metabolic syndrome.

Results. Multiple pathophysiological syndromes with specific clinical manifestations can be highlighted in Graves' disease. Inadequate hypersecretion of thyroid hormones triggers cold stress at ambient comfort temperatures, leading to thyroid hyperthermia syndrome: increased myogenic (muscle tremor), metabolic (increased basal metabolism) and functional (stimulating organ function) thermogenesis. In addition to these manifestations, Graves' disease has an important role in the appearance and development of the components of the metabolic syndrome, these being: hyperglycemia, elevated levels of low-density lipoprotein cholesterol, triglycerides and hypertension. The general effect of thyroid hormones is hypermetabolism - the paradoxical simultaneous activation of anabolism and catabolism of nutrients, resulting in increased nutrient turnover.

Conclusion. This study reports the pathophysiological manifestations in Graves' disease. We notice that in hyperthyroidism there are numerous disorders of carbohydrate, lipid, protein, energy metabolism; the components of the metabolic syndrome develop, a series of clinical syndromes with very pronounced symptoms are installed, which require special attention.