

IODINE DEFICIENCY IN THYROID PATHOLOGY

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Anotation: Almost a third of the world's population lives in regions of iodine deficiency. When iodine intake is less than 50 mcg per day, goiter, as a rule, has an endemic distribution, and if it is less than 25 mcg, cases of iodine deficiency hypothyroidism may occur.

Key words: iodine, goiter, deficiency, hypothyroidism.

Аннотация: Практически треть населения мира проживает в регионах йодного дефицита. При потреблении йода меньше 50 мкг в сутки зоб, как правило, имеет эндемическое распространение, а если оно оказывается меньше 25 мкг, могут встречаться случаи йододефицитного гипотиреоза.

Ключевые слова: йод, зоб, дефицит, гипотиреоз.

Thyroid diseases (TD) are the most common human pathology. Their prevalence varies in different regions, which primarily depends on the level of iodine intake. Epidemiological studies of thyroid dysfunction have a number of limitations, for example in terms of defining the concepts of manifest and subclinical. With nodular goiter, functional autonomy of the thyroid gland may develop, leading to the development of thyrotoxicosis, the prevalence of which in this regard may increase significantly at the beginning of mass iodine prophylaxis programs, especially among people over 40 years of age. In addition, against this background, the prevalence of autoimmune thyroiditis and, as an outcome of this disease, hypothyroidism may increase. Iodine-induced thyrotoxicosis develops most often in regions of severe iodine deficiency, especially if there is a rapid and

excessive increase in iodine intake. Quite a few works devoted to studying the prevalence of autoimmune thyroid diseases in regions of iodine deficiency; for example, in a Sicilian study, the prevalence of functional autonomy of the thyroid gland was studied depending on the iodine deficiency of the region. The prevalence of functional autonomy of the thyroid gland was significantly higher in areas with iodine deficiency: 4.4% of the total number of patients compared to 2.7% in iodine-free regions. In regions with normal iodine intake, most cases of thyroid disease are autoimmune, including primary atrophic hypothyroidism, thyroiditis Hashimoto's (autoimmune thyroiditis) and Graves' disease. Total thyroxine (T.), levels of antibodies to thyroid peroxidase and thyroglobulin (TG). According to the study, the prevalence of hypothyroidism in the general population was 4.6% (0.3% manifest and 4.3% subclinical), which corresponds to more than 9.5 million people with unaccounted for thyroid insufficiency, the prevalence of hyperthyroidism was 1.3% (0.5% manifest and 0.7% subclinical), which corresponded to 2 million 600 thousand people with unaccounted for hyperthyroidism.

The most common cause of thyrotoxicosis is Graves' disease, followed in terms of prevalence by multinodular toxic goiter, followed by rarer causes such as solitary toxic adenoma, thyroiditis, etc. The peak incidence of Graves' disease is between 20 and 49 years, but in some ethnic groups it occurs in older age (after 60 years). It should also be noted that studies use different points of distribution/separation of patients depending on the level of TSH - from 0.1 to 0.5 mU / l, which also reflects based on intermediate and final results of research.

A region with iodine is also important, since even a moderate deficiency leads to a multiple increase in cases of thyrotoxicosis caused by the presence of UTD, and this difference manifests itself in the older age group (50 years and older). Thus, according to existing literature data, the overall prevalence of subclinical hyperthyroidism, not counting unregistered cases of manifest thyrotoxicosis, the prevalence of which, according to minimal estimates, is 1.5-2

times higher than official statistics, varies from 1.0 to 9.7% depending on the region, while it is highest among people over 50 years of age. Among the risk factors, only female gender can be unconditionally determined, since women are 5-10 times more likely to suffer from autoimmune diseases.

LITERATURE

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