

## FEATURES PHARMACOTHERAPY OF HYPOTHYROIDISM

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Hypothyroidism is a clinical syndrome caused by a prolonged, persistent deficiency of thyroid hormones in the body or a decrease in its biological effect at the tissue level.

Hypothyroidism occurs more often in the age group over 60 years. In women, hypothyroidism is more common 2 times than in men.

The causes of primary hypothyroidism (thyroid disease) are factors such as autoimmune processes, treatment with radioactive iodine, iodine deficiency, rare hereditary enzymes, drugs (lithium, amiodarone, etc.), radiation therapy and surgical treatment. Secondary hypothyroidism is an inadequate function of the hypothalamus and pituitary gland (TSH, tiroliberin).

Signs of hypothyroidism can be fatigue, loss of energy, lethargy, weight gain, decreased appetite, dry skin, pallor, hair loss, drowsiness, muscle aches, joint pains, depression, mental disorders.

Various thyroid hormone preparations are available for replacement therapy, including synthetic preparations of T<sub>4</sub>(L-thyroxine), T<sub>3</sub>(liothyronine), combinations of the 2 synthetic hormones, and desiccated animal thyroid extract. The starting dose L-thyroxine in young or middle-aged patients who are otherwise healthy can be 100 mcg or 1.7 mcg/kg po once/day. The dose is adjusted every 6 wk until maintenance dose is achieved. Liothyronine (a synthetic analogue of T<sub>3</sub>) is taken at a dose of 25-100 mcg / day, maintaining a dose of 25 to 75 mcg / day. Lytryronin is not used alone, mainly in combination with thyroxine 1: 10-14 (T<sub>4</sub> / T<sub>3</sub>) with ineffective monotherapy T<sub>4</sub>. h. Additionally, patients receiving liothyronine are chemically hyperthyroid for at least several hours a day, potentially increasing cardiac risks.

The drug Thyroid gland of animals (pig or cow thyroid glands) should be taken before breakfast, its initial dose is 15-30 mg per day orally, but may increase by 15 mg / day every 2-3 weeks (or 30 mg / day every 30 days), maintenance dose: 60-120 mg per day.

Prevention of hypothyroidism is a balanced diet (sufficient intake of iodine in the body), preventive counseling of an endocrinologist for people living in areas that are poor in iodine and therapy of endocrine pathologies, including thyroid diseases.