



Topic Brief: Hypothyroid Patient Dissatisfaction

Date: 5/21/2024

Nomination Number: 1043

Purpose: This document summarizes the information addressing a nomination submitted on February 12, 2023, ([link to nomination](#)) through the Effective Health Care Website. This information was used to inform the Evidence-based Practice Center (EPC) Program decisions about whether to produce an evidence report on the topic, and if so, what type of evidence report would be most suitable.

Issue: The nominator is an individual who is dissatisfied with current standard of care for diagnosing and treating hypothyroidism. They would like to see new research on harms associated with underdiagnosis and T4 monotherapy.

Findings: The EPC program will not create an evidence product for this topic because primary research falls outside of the program's scope. We have included additional resources which may be helpful to the nominator and others with similar concerns about standard of care in hypothyroid diagnosis and treatment.

Background

Hypothyroidism, also known as “underactive thyroid,” is a condition in which the thyroid gland doesn't produce enough hormones to maintain normal metabolic functions.¹ The thyroid gland is a part of the endocrine system, which is the system of glands that produce and secrete hormones into the bloodstream.² Thyroid hormones play a crucial role in regulating the body's metabolism so when thyroid hormones are out of balance, people can experience multiple unpleasant symptoms that impact their quality of life. These include fatigue, sensitivity to cold, weight gain or difficulty losing weight, depression, constipation, muscle cramps, and joint pain. Untreated thyroid disorders can lead to heart disease, goiter, peripheral neuropathy, osteoporosis, and rarely, even death.¹

Hypothyroidism is one of the most common endocrine disorders with an estimated 12% of people in the U.S. affected in their lifetime.³ Women are 8 to 9 times more likely to develop primary hypothyroidism than are men.⁴ Iodine deficiency is the most common cause of thyroid disorders globally but in the US and other countries with sufficient dietary iodine intake, chronic autoimmune disease (Hashimoto's disease) is the most common cause of thyroid insufficiency. The condition is diagnosed through blood tests that measure the levels of thyroid hormones (TSH, T4, and T3) and can be effectively treated with synthetic thyroid hormone replacement medication, such as levothyroxine. With proper treatment, most symptoms of hypothyroidism can be relieved, and the condition can be managed effectively.⁴ However, nearly one-third of

treated patients continue to suffer symptoms even when achieving clinical targets, leading some clinicians and patients to search for better symptom control.⁵

Related Resources

- Hypothyroidism: Diagnosis and Treatment. Comprehensive guide from the American Academy of Family Physicians.⁶
- Guidelines for the treatment of hypothyroidism: prepared by the American Thyroid Association Task Force on Thyroid Hormone Replacement.⁷
- The American Academy of Clinical Endocrinology is currently in the process of updating their guidelines for treatment of hyperthyroid and hypothyroid conditions.

References

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