Review Article

Journal of Biochemistry and Biophysics
Volume 9 Number 2, July - December 2024
DOI: http://dx.doi.org/10.21088/rfpjbb.2582-3558.9224.2

Hypothyroidism Inceasing Among Women in India

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How to cite this article:

Neha Suthar, Sachin C. Narwadiya, Hypothyroidism Inceasing Among Women in India. RFP Jour. of Bio. and Biophy. 2024;9(2): 115–117.

Abstract

Thyroid diseases are prevalent all over the world. The burden of thyroid disease is also high in India. According to various studies on thyroid diseases, about 42 million people in India suffer from thyroid diseases. This review will focus on the prevalence of five thyroid diseases in India: (1) hypothyroidism, (2) hyperthyroidism, (3) goitre and iodine deficiency, (4) Hashimoto's thyroiditis, and (5) thyroid cancer. The present review will also briefly discuss important studies in India that have addressed the use of thyroid hormones, particularly during pregnancy and childhood.[1]

In India due to lack of awareness about healthy diet habits, importance of exercise preferably among girls and women lead to genesis of Hypothyroidism.

Keywords: Hypothyroidism; Hyperthyroidism; Goitre; Iodine deficiency; Hashimoto's thyroiditis; Thyroid cancer.

INTRODUCTION

Thyroid disorders are prevalent in India and the main target in the past was Iodine Deficiency Disorder (IDD). India's international salt iodization service has been in use for over 30 years. However, there are not many studies that have assessed the prevalence of thyroid disease in the post-iodization period. The asymptomatic condition is mild and triiodothyronine levels are slightly elevated.[2]

Hypochondria affects: In India, hypothyroidism has traditionally been classified as an iodine deficiency disorder (IDD). This disease is usually measured by total goiter and urine iodine concentration in schoolaged children. The cost is very low. Adequate iodized salt is consumed.[3]

Cross-sectional studies are needed to fully understand the changes in thyroid disease across the country, especially after iodine supplementation. This study aims to determine the prevalence of hypothyroidism among women in India. Both conditions can have medical, financial and psychological impacts on our lives. Hypothyroidism affects fertility in many ways, causing an ovulatorycycle, luteal phase disorders, high prolactin (PRL) levels and sex hormone imbalances.[4]

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Received: 12.11.2024 **Accepted:** 20.12.2024

Therefore, normal thyroid function is important for pregnancy, pregnancy, and pregnancy care, even in the first few days after conception. Any woman who is trying to conceive, has a family history of thyroid problems, has irregular menstrual cycles, has had more than two miscarriages, or has not been able to conceive after a year of unprotected intercourse should have a thyroid test.[5]

Thyroid testing should include thyroid autoimmune tests such as T3, T4, thyroid stimulating hormone (TSH), and thyroid peroxidase (TPO) antibodies, thyroglobulin/anti-thyroglobulin antibodies, and thyroid stimulating immunoglobulin (TSI). [6]

Autoimmune thyroid testing may or may not be included in fertility testing because the presence of thyroid antibodies increases the risk of miscarriage in women. It has been found to cause 4% infertility and miscarriage. A mildly elevated TSH level and normal T3 and T4 indicate subclinical hypothyroidism, while a high T3 and low T4 level indicate clinical hypothyroidism. Diagnosis and treatment (including treatment) of subclinical hypothyroidism in pregnancy is important unless there are other independent risk factors.[8]

Many pregnant women with hypothyroidism develop hyperprolactinemia due to failure to ovulate, which results in increased production of thyroid stimulating hormone-releasing hormone (TRH). It is good for fertility and pregnancy.[9]

Thyroid dysfunction is associated with a range of reproductive problems, from sexual dysfunction to irregular menstruation and infertility. Hyperprolactinemia disrupts GnRH pulses, impairs ovarian function and slows growth. Early diagnosis is important, so appropriate treatment is often given to prevent brain damage. Congenital hypothyroidism is common in India, affecting 1 in 2,640 births and 1 in 3,800 births worldwide. In our country, the diagnosis of congenital hypothyroidism is often delayed. This delay may be due to lack of awareness of the disease and lack of facilities or programs to screen and test infants for the disease. 79% had thyroid nodules. The most common causes of hypothyroidism in children are thyroid underdevelopment, hormonal abnormalities and thyroiditis. Some specific issues are not adequately managed.[12]

At the National Advanced Management Workshop on Thyroid Disease held in Chennai, India on June 5, 2014, participants learned that 42 million people in India are affected by thyroid disease.[13]

Hypothyroidism is the most common thyroid disorder in India, affecting one in 10 adults. Despite this unfortunate condition, there are no cases of severe hypothyroidism in the country. The prevalence is higher in the inner cities (like Kolkata, Delhi, Ahmedabad, Bangalore and Hyderabad) than in the coastal cities (like Mumbai, Goa and Chennai) (11.7% vs. 9.5%). Ambrish Mithal, director of health and diabetes at Medanta in Gurgaon, India, said that the overall cause of thyroid-stimulating hormone in India is higher than in Western countries, which could be related to iodine deficiency in India. That's right. The prevalence of hypothyroidism is highest in the 46-54 age group (13.1%), while the 18-35 age group is less affected (7.5%). This disease.[14]

INDIAN SCENARIO

In India, environmental factors such as iodine deficiency can cause hypothyroidism. "Goiter and cyanide affect iodine metabolism," says Mittal. [Pesticide use and endocrine disruptors may be the cause. It affects 5-20% of women and 3-8% of men. The incidence of the disease varies according to genetics, and is more common in white people and in people with high iodine levels. The most common causes of hypothyroidism are autoimmune damage to the thyroid gland and previous thyroid surgery or radioactive iodine therapy. Many drugs, including amiodarone, cytokines, and lithium, often cause hypothyroidism. Symptoms may be atypical and measurement of thyroid-stimulating hormone (TSH) levels should be part of the biochemical investigation in adults without disease.

Findings of elevated TSH levels should be confirmed by repeated testing to identify, assess and differentiate exercise and should be supported by serum thyroxine and thyroid peroxidase antibody levels.

CONCLUSION

Patients with subclinical hypothyroidism should be informed about their disease and other medical conditions. Only a small percentage of patients treated for subclinical hypothyroidism are happy after treatment. Clinical monitoring in adults should include TSH blood tests once or twice a year and minor adjustments in levothyroxine sodium dosage to maintain TSH levels within the normal range. Individual therapy is important for effective management, and many factors such as age, TSH secretion, thyroid autoimmunity, comorbidity burden, and frailty should be taken into account

in the treatment of SHT in the elderly. T4 is the drug of choice for the treatment of hypothyroidism in adults, but the risk of overtreatment, dosage, and patient compliance should be given more consideration, and the thyroid should be monitored regularly. Optimal therapy means administering L-T4 on a case-by-case basis and carefully assessing the risk of overtreatment (e.g., over dosage due to inappropriate initiation of therapy, inappropriate drug changes, etc.). However, the dose of L-T4 should be titrated starting at ±0.3 to 0.4 µg/kg/day and increased by 10 to 15% after 6 to 8 weeks if necessary to a good TSH target of 2.5 to 3.5 mIU/day.[15] Levothyroxine sodium is the most effective treatment for hypothyroidism. If heart disease is suspected, the starting dose should be lower. Addition or withdrawal of tablets can be done at one time because of the long half-life of levothyroxine sodium. Or twice a week. Levothyroxine sodium is only partially absorbed after meals because food, medications, and tablet ingredients can affect absorption. Years of research have shown that combining levothyroxine sodium and liothyronine can improve clinical outcomes, but recent research does not support this theory. Therefore, there is no information on the benefits of liothyronine replacement. If liothyronine is added as an alternative, the liothyronine dose should be kept low to moderate, preferably twice daily. In adults with elevated serum TSH, thyroid hormone therapy is no more effective than placebo. The main risk of levothyroxine sodium therapy is overdose, which can cause side effects such as anxiety, muscle pain, fractures, and atrial fibrillation. Subclinical hypothyroidism (increased serum TSH but using more than one test) is somewhat different from overt hypothyroidism.

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