

Clinical Manifestations of Subclinical Thyroid Dysfunction in Women of Reproductive Age

Giuseppe Chiara*

Department of Medicine and Surgery, University Hospital of Parma, Parma, Italy

DESCRIPTION

Abnormal thyroid hormone levels without obvious clinical symptoms are known as subclinical thyroid dysfunction and they are becoming more widely acknowledged as a serious health issue, especially for women of reproductive age. The diagnosis of this illness, which encompasses both subclinical hypothyroidism and subclinical hyperthyroidism, can be difficult since individuals may not show the conventional symptoms of thyroid dysfunction. Even while subclinical thyroid dysfunction may not exhibit obvious symptoms, it can have significant effects on menstrual cycles, fertility, reproductive health and the general well-being of those who are afflicted. TSH levels are high in subclinical hypothyroidism, but free thyroid hormone (T3 and T4) levels are within normal limits. In contrast, subclinical hyperthyroidism is characterized by low TSH levels and normal levels of free thyroid hormone.

Subclinical hypothyroidism is more prevalent in women of reproductive age and has been associated with a variety of clinical symptoms. The possible effect on irregular menstruation is one of the most important issues in this demographic. Menstrual cycle abnormalities, such as heavy or protracted periods, oligomenorrhea, or in certain situations, amenorrhea, can occur in women with subclinical hypothyroidism. Thyroid hormone's impact on the hypothalamic-pituitary-gonadal axis, which controls menstrual periods, is believed to be the cause of these changes. A gonadotropin secretion imbalance brought on by hypothyroidism might impact ovarian function and estrogen production, upsetting regular menstrual cycles. The possible impact of subclinical hypothyroidism on fertility in women of reproductive age is another significant factor. Studies indicate that even modest thyroid malfunction can affect reproductive function, even if subclinical hypothyroidism may not result in overt signs of infertility. Women may find it more difficult to conceive if there are disruptions in the thyroid hormones that regulate the menstrual cycle, ovulation and implantation. Pregnancy may be difficult for women with subclinical hypothyroidism due to anovulation or irregular ovulation. Furthermore, there is some data that suggests subclinical

hypothyroidism may raise the chance of miscarriage, maybe as a result of early pregnancy loss or poor implantation. Subclinical hypothyroidism, in addition to its effects on fertility and menstrual health, can affect the outcome of pregnancy. Despite having a lower likelihood of overt pregnancy issues than overt hypothyroidism, subclinical hypothyroidism has been linked to a higher chance of negative outcomes. According to research, untreated or insufficiently treated subclinical hypothyroidism during pregnancy may raise the risk of Intrauterine Growth Restriction (IUGR), preeclampsia and gestational hypertension. Thyroid dysfunction in mothers may also have an impact on the neurodevelopmental outcomes of their children, especially in relation to behavior and cognitive performance. Reducing the likelihood of these negative consequences requires early identification and treatment of thyroid dysfunction in women of reproductive age, especially during pregnancy.

In women of reproductive age, subclinical hyperthyroidism can also present with modest clinical symptoms, but less frequently than subclinical hypothyroidism. Low or suppressed TSH levels are frequently linked to this illness, while free T3 and T4 levels stay within the typical reference range. The clinical signs of subclinical hyperthyroidism are frequently mild and may not be easily identified. Palpitations, anxiety, heat intolerance and exhaustion are among of the symptoms that some women may have, albeit they are not as severe as those associated with overt hyperthyroidism. Lighter or shorter menstrual periods are another effect of subclinical hyperthyroidism on menstrual function. In certain situations, women may have oligomenorrhea or not menstruate at all. In women of reproductive age, subclinical thyroid disease frequently presents with vague clinical symptoms, making diagnosis difficult. Women who suffer from these disorders may have symptoms including mood swings, changes in skin and hair, exhaustion, or weight fluctuations, all of which can be caused by a number of different factors. These symptoms are frequently subtle and change over time, making it challenging for patients and medical professionals to identify thyroid dysfunction as the root cause. Thyroid function tests, which assess TSH and thyroid hormone levels, are therefore essential for identifying subclinical thyroid impairment.

Correspondence to: Giuseppe Chiara, Department of Medicine and Surgery, University Hospital of Parma, Parma, Italy, E-mail: chiara@giu.it

Received: 25-Nov-2024, Manuscript No. JTDT-24-35753; **Editor assigned:** 28-Nov-2024, PreQC No. JTDT-24-35753 (PQ); **Reviewed:** 12-Dec-2024, QC No. JTDT-24-35753; **Revised:** 19-Dec-2024, Manuscript No. JTDT-24-35753 (R); **Published:** 26-Dec-2024, DOI: 10.35841/2167-7948.24.13.352

Citation: Chiara G (2024). Clinical Manifestations of Subclinical Thyroid Dysfunction in Women of Reproductive Age. *Thyroid Disorders Ther.* 13.352.

Copyright: © 2024 Chiara G. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

CONCLUSION

In women of reproductive age, subclinical thyroid dysfunction can have significant clinical ramifications, especially when it comes to menstrual health, fertility and the result of pregnancy. Early identification and therapy are essential due to the condition's potential impact on reproductive function and general health, even though it is frequently asymptomatic or just

mildly symptomatic. Thyroid functions in women with reproductive health issues may be regularly monitored by medical professionals, who can assist avoid or lessen the effects of subclinical thyroid dysfunction and enhance the lives of those who are impacted. Optimizing results requires a customized treatment plan that considers the patient's symptoms, reproductive objectives and thyroid function test findings.