

**THYROID AND PREGNANCY****Effects of thyroid hormone replacement during pregnancy****BACKGROUND**

Subclinical hypothyroidism is defined as an increased TSH but normal thyroid hormone levels. While it is clear that overt hypothyroidism in the mother during pregnancy can affect the development of the baby, it is less clear about the effects of subclinical hypothyroidism. However, in some studies there have been links to higher risk for adverse pregnancy outcomes. Guidelines on the treatment of subclinical hypothyroidism during pregnancy differ based on which such patients should be treated. Some guidelines recommend treatment of all patients, others only if the thyroid TPO antibody is positive. This study was done to see if there is a risk of treatment with levothyroxine in patients with subclinical hypothyroidism during pregnancy.

THE FULL ARTICLE TITLE

Maraka S et al Effects of levothyroxine therapy on pregnancy outcomes in women with subclinical hypothyroidism. *Thyroid*. May 16, 2016 [Epub ahead of print].

SUMMARY OF THE STUDY

Data was collected from 366 patients between January 2011 and December 2013. The women were divided into two groups: 82 women received that received levothyroxine and the rest did not. The investigators looked for poor

outcomes such as pregnancy loss, pre-term delivery and abnormal birth weight among other factors.

The goals for treatment were met in nearly 70% of the women who received levothyroxine replacement. Treatment was linked to a 59 % lower risk for pregnancy loss and 67% lower risk for pre-term delivery. Also, the risk for having low birth weight in the newborn was lower.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Investigators found a benefit of levothyroxine replacement in pregnancy outcomes in selected women. This study adds more support treat even subclinical hypothyroidism during pregnancy as it may be linked to improved pregnancy outcomes.

—Vibhu Sharma, MD

ATA THYROID BROCHURE LINKS

Hypothyroidism: <http://www.thyroid.org/hypothyroidism/>

Thyroid and Pregnancy: <http://www.thyroid.org/thyroid-disease-pregnancy/>

Thyroid Hormone Treatment: <http://www.thyroid.org/thyroid-hormone-treatment/>

ABBREVIATIONS & DEFINITIONS

Subclinical Hypothyroidism: a mild form of hypothyroidism where the only abnormal hormone level is an increased TSH. There is controversy as to whether this should be treated or not.

Overt Hypothyroidism: clear hypothyroidism an increased TSH and a decreased T₄ level. All patients with overt hypothyroidism are usually treated with thyroid hormone pills.

Thyroid hormone therapy: patients with hypothyroidism are most often treated with Levothyroxine in order to return their thyroid hormone levels to normal. Replacement therapy means the goal is a TSH in the normal range for pregnancy.

Levothyroxine (T4): the major hormone produced by the thyroid gland and available in pill form as Synthroid™, Levoxyl™, Tyrosint™ and generic preparations.