A publication of the American Thyroid Association

### **HYPOTHYROIDISM**

# What predicts lack of compliance with thyroid hormone during pregnancy in hypothyroid women?

#### BACKGROUND

It is well known that untreated and under-treated hypothyroidism during pregnancy leads to increased miscarriage and pregnancy complications. Women that take their thyroid hormone regularly and keep their TSH values in the normal range will have less problems during pregnancy and their babies will have improved developmental outcomes.

There are studies that show that there are many women who do not take their thyroid hormone regularly while pregnant. Sometimes, a woman's concern about the safety of the medication or a particular personality trait may influence their compliance with this medication. The goal of this study was to identify certain factors that may predict lack of compliance with thyroid hormone during pregnancy. This, in turn, will allow for more specific interventions, such as education, targeted to women identified to be less likely to be compliant.

#### THE FULL ARTICLE TITLE

Juch H et al Medication adherence among pregnant women with hypothyroidism—missed opportunities to improve reproductive health? A cross-sectional, web-based study. Patient Educ Couns. April 11, 2016 [Epub ahead of print].

#### SUMMARY OF THE STUDY

This study was done using an anonymous online questionnaire available in 18 countries in North America, Australia and Europe that was accessed via websites and social networks for pregnant women. Data was collected during a period of two months. Pregnant women with self-reported hypothyroidism were included in the study.

The questionnaire was comprehensive and included questions about marital status, education, age, immigration status among others. A section asked for information about the type of medication used to treat the hypothyroidism and about other health problems and their treatment. Depression and certain personality traits were also addressed.

A total of 5095 women completed the questionnaire and of these, 231 women reported being hypothyroid.

Of these women, 197 were using levothyroxine, 16 were using other treatments including iodine and T<sub>3</sub> hormone and 16 reported not taking any medication. Among women taking medications, 17% said that they had low adherence to taking their thyroid medicine; 44% reported medium adherence and 39% reported high adherence. The reasons given for not taking their medications regularly included forgetfulness or just being hassled about their treatment plan. When further analysis of data was done to eliminate other factors, younger age, not taking prenatal vitamins and agreement with the general statement that it is better to not take medications while pregnant were associated with low medication adherence. Women who reported believing that untreated hypothyroidism was more risky than the medication itself, and those women with high scores for conscientiousness were more likely to be adherent.

The 16 hypothyroid women who did not use thyroid medicines during pregnancy were more likely to smoke, less likely to be married or live with a partner, less likely to take prenatal or over the counter medicines, and had higher scores for neuroticism as a personality trait than the women who did use medications.

# WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Surprisingly, 17% of hypothyroid women reported low adherence to thyroid medication during pregnancy and 7% of pregnant hypothyroid women reported not taking any thyroid medication. The high percentage of patients reporting poor compliance with a simple and safe regimen of treatment for a common condition is worrisome. More patient education is essential regarding the treatment of hypothyroidism during pregnancy.

— Jesse Block-Galaraza, MD

#### ATA THYROID BROCHURE LINKS

Thyroid Disease and Pregnancy: http://www.thyroid.org/thyroid-disease-pregnancy/ Hypothyroidism: http://www.thyroid.org/hypothyroidism/



## CLINICAL THYROIDOLOGY FOR THE PUBLIC

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### HYPOTHYROIDISM, continued

#### **ABBREVIATIONS & DEFINITIONS**

Hypothyroidism: a condition where the thyroid gland is underactive and doesn't produce enough thyroid hormone. Treatment requires taking thyroid hormone pills.

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

Triiodothyronine (T3): the active thyroid hormone, usually produced from thyroxine.

lodine: an element found naturally in various foods that is important for making thyroid hormones and for normal thyroid function. Common foods high in iodine include iodized salt, dairy products, seafood and some breads.

# **Thyroid Awareness Monthly Campaigns**

The ATA will be highlighting a distinct thyroid disorder each month and a portion of the sales for Bravelets<sup>™</sup> will be donated to the ATA. The month of September is **Thyroid Nodule Awareness Month** and a bracelet is available through the <u>ATA</u> <u>Marketplace</u> to support thyroid cancer awareness and education related to thyroid disease.



