



## THYROID AND PREGNANCY

### Subclinical hypothyroidism may be a risk factor for high blood pressure problems during pregnancy

#### BACKGROUND

High blood pressure is associated with many heart problems. In some studies, thyroid dysfunction (hypothyroidism or hyperthyroidism) during pregnancy has been a risk factor for several related disorders caused by high blood pressure. It is unclear if subclinical (mild) thyroid dysfunction carries a similar risk. In patients with subclinical thyroid dysfunction, the TSH is abnormal (high in subclinical hypothyroidism, low in subclinical hyperthyroidism) while the thyroid hormone levels are normal. The current study is one of the largest ones done to determine if there is a strong relationship between thyroid dysfunction and high blood pressure during pregnancy.

#### THE FULL ARTICLE TITLE

Wilson KL et al. Subclinical thyroid disease and the incidence of hypertension in pregnancy. *Obstet Gynecol* 2012;119:315-20.

#### SUMMARY OF THE STUDY

Over 24,000 predominantly Hispanic pregnant women living in Texas between 2000-2003 were studied. From blood tests done during the first half of pregnancy, 528 had subclinical hypothyroidism and 584 had subclinical hyperthyroidism. The pregnant women with subclinical hypothyroidism had the highest risk of high blood pressure problems during pregnancy compared to the women with subclinical hyperthyroidism and the women with normal thyroid function.

#### WHAT ARE THE IMPLICATIONS OF THIS STUDY?

This study suggests that there may be an association between subclinical hypothyroidism and high blood

pressure during pregnancy. In another older study, treatment of subclinical hypothyroidism led to a lower risk of high blood pressure during pregnancy. The results of these studies are important and suggest that treatment of subclinical hypothyroidism during pregnancy may be of benefit. However, thyroid function testing during pregnancy is controversial and it is currently not routinely done in all pregnancies.

—Angela Leung, MD

#### ATA THYROID BROCHURE LINKS

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

Hypothyroidism: <http://www.thyroid.org/what-is-hypothyroidism>

#### 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.

**Subclinical Hyperthyroidism:** a mild form of hyperthyroidism where the only abnormal hormone level is a decreased TSH.

**TSH: Thyroid Stimulating Hormone** — produced by the pituitary gland that regulates thyroid function; also the best screening test to determine if the thyroid is functioning normally.