



HYPOTHYROIDISM AND PREGNANCY

Clinical care of women with hypothyroidism during their reproductive years requires awareness of the consequences by patients and clinicians

BACKGROUND

Hypothyroidism affects predominantly women and is common during the reproductive years. During pregnancy, the body's demand for thyroid hormone increases. Indeed, in women with hypothyroidism who become pregnant, their thyroid hormone requirements can increase up to 30-50%. Physicians typically check a TSH early in pregnancy and increase the patient's dose of thyroid medication by to keep the TSH in the low half of the normal range. This study was performed to determine how frequently TSH was checked before and during pregnancy and to see what proportion of the hypothyroid pregnant population had their thyroid dose adjusted.

THE FULL ARTICLE TITLE

Vadiveloo T et al. Thyroid testing in pregnant women with thyroid dysfunction in Tayside, Scotland: the thyroid epidemiology, audit and research study (TEARS). Clin Endocrinol (Oxf) 2013;78:466-71.

SUMMARY OF THE STUDY

A total of 950 pregnant women were studied between January 1, 1993 and March 31, 2011 in Tayside, Scotland. These women had already been diagnosed with hypothyroidism at least 6 months prior to pregnancy. The mean age of the women in the study was 32.1 years. A total of 96.9% of patients had their TSH checked just

before pregnancy and a total 81.2% of women had their TSH checked during the first trimester. As expected, 55% of women had an elevated TSH in the first trimester, but the thyroid hormone dose was adjusted in only 39.2% of women.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

As shown before, the majority of hypothyroid women have an elevated TSH during the 1st trimester of their pregnancy. However, in this study only ~70% had their thyroid hormone doses adjusted. Since even mild hypothyroidism during pregnancy can have adverse effects on the baby, it is important that the thyroid hormone dose be adjusted to keep the TSH in the lower half of the normal range. This study is important to help both physicians and patients become aware of this problem.

— Heather Hofflich, DO

ATA THYROID BROCHURE LINKS

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

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

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

ABBREVIATIONS & DEFINITIONS

Hypothyroidism: a condition where the thyroid gland is underactive and doesn't produce enough thyroid hormone. Treatment requires taking 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 and is the usual therapy. Suppressive therapy means that the goal is

a TSH below the normal range and is used in thyroid cancer patients to prevent growth of any remaining cancer cells.

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

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.