

**THYROID AND PREGNANCY****Congenital hypothyroidism in the mother and pregnancy complications****BACKGROUND**

Thyroid hormone during pregnancy is essential for normal growth and development of the baby. Inadequately treated hypothyroidism in the mother has been associated with negative pregnancy outcomes such as premature delivery and miscarriage. Thyroid hormone requirements increase with pregnancy and many women with pre-existing hypothyroidism need an increase in their thyroid hormone during pregnancy. It is unclear whether the cause of the hypothyroidism in the mother is associated with problems during pregnancy. Congenital hypothyroidism refers to hypothyroidism detected shortly after birth. Fortunately, congenital hypothyroidism is diagnosed and treated much earlier due to the widespread screening programs in most industrialized countries. The aim of this study was to compare pregnancy outcomes in women with a history of congenital hypothyroidism to women without thyroid disease in a national reference population.

THE FULL ARTICLE TITLE

Leger J et al. Pregnancy outcomes and relationship to treatment adequacy in women treated early for congenital hypothyroidism: a longitudinal population-based study. *J Clin Endocrinol Metab.* November 25, 2014 [Epub ahead of print].

SUMMARY OF THE STUDY

This study examined self-reported pregnancy outcomes in women diagnosed with congenital hypothyroidism in the first 10 years (1978-1988) following the introduction of neonatal screening for thyroid disease in France. A total of 1748 women with congenital hypothyroidism were eligible for this study and 336 women reported a total of 570 pregnancies. The investigators analyzed

207 pregnancies reported prior the study period and 174 pregnancies reported in the 3 years following the initial survey. Women from the French national Perinatal Survey served as the reference population. Women with congenital hypothyroidism were more likely to be overweight and give birth to larger babies than women in the reference population. Results indicated that women with congenital hypothyroidism were more likely to report problems with their pregnancies including gestational high blood pressure, emergency cesarean delivery, need for labor induction and premature delivery. Women with a TSH greater than or equal to 10 mIU/L during the first trimester demonstrated an increase risk of preterm labor and those with an elevated TSH in the first 6 months of the pregnancy were at increased risk of delivering a large baby.

WHAT ARE THE IMPLICATIONS OF THIS STUDY?

Women with congenital hypothyroidism are at increased risk of pregnancy complications compared to women in a national reference population and some complications, such as preterm labor, may be associated with inadequate thyroid hormone replacement. Special care should be taken to adequately treat hypothyroidism in the mother during pregnancy.

— Whitney Woodmansee 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

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

Congenital hypothyroidism: hypothyroidism that is present at birth

Miscarriage: this occurs when a baby dies in the first few months of a pregnancy, usually before 22 weeks of pregnancy.