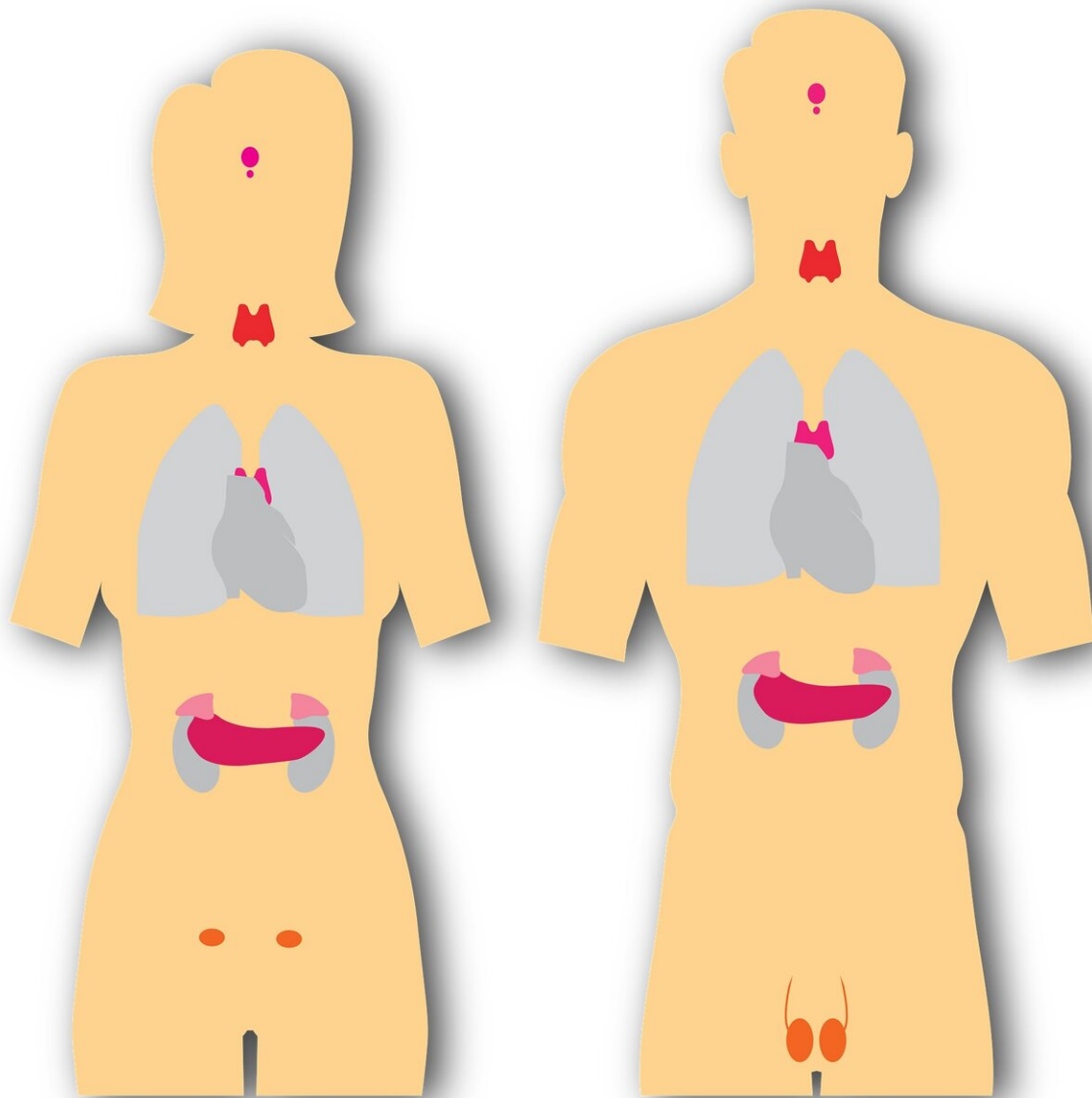


Subclinical hypothyroidism in early pregnancy linked to higher risk of overt hypothyroidism

August 2 2024



Credit: Pixabay/CC0 Public Domain

A new study has shown that subclinical hypothyroidism diagnosed before 21 weeks of pregnancy is associated with more than fourfold higher rates of overt hypothyroidism or thyroid replacement therapy within 5 years of delivery. The study [is published](#) in the peer-reviewed journal *Thyroid*, the official journal of the American Thyroid Association.

Subclinical [hypothyroidism](#), or a change in the levels of thyroid-stimulating hormone (TSH) that isn't severe enough to cause symptoms, is especially common during [pregnancy](#), affecting as many as 1 in 4 pregnant people. While subclinical hypothyroidism isn't inherently dangerous, overt hypothyroidism comes with serious symptoms including fatigue, depression, and [heart problems](#).

Michael Varner, MD, professor of obstetrics and gynecology in the Spencer Fox Eccles School of Medicine at University of Utah Health, and his co-authors reported that progression to overt hypothyroidism was more common in individuals with thyroid-stimulating hormone levels that were more than twice the normal level.

People with higher levels of antibodies against a thyroid enzyme, which can indicate that the body is mounting an autoimmune response against the thyroid, were also at higher risk of hypothyroidism within 5 years after delivery compared to those with lower levels of the antibody.

The investigators found that diagnosis of hypothyroxinemia, a deficiency in the thyroid hormone thyroxine, before 21 weeks of pregnancy was not

associated with the development of overt hypothyroidism after delivery.

"Studying the long-term associations of test results, as well as the impacts of our interventions, during pregnancy on the health and well-being of mothers and children is a particularly important aspect of clinical research in perinatal medicine," Varner says. "While the parent NICHD Maternal-Fetal Medicine Units Network trials from which our data are derived showed no difference in 5-year neurodevelopmental outcomes in children from prenatal treatment of either subclinical hypothyroidism or hypothyroxinemia, our data lend further evidence to the postpartum time period as a time when [autoimmune diseases](#), in this case, hypothyroidism, are more likely to be present."

More information: Michael W. Varner et al, Progression of Gestational Subclinical Hypothyroidism and Hypothyroxinemia to Overt Hypothyroidism After Pregnancy: Pooled Analysis of Data from Two Randomized Controlled Trials, *Thyroid* (2024). [DOI: 10.1089/thy.2023.0616](#)

Provided by University of Utah Health Sciences

Citation: Subclinical hypothyroidism in early pregnancy linked to higher risk of overt hypothyroidism (2024, August 2) retrieved 3 August 2024 from <https://medicalxpress.com/news/2024-08-subclinical-hypothyroidism-early-pregnancy-linked.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--