THYROID FUNCTION

Thyroid hypofunction in pregnancy

...47% of the women who required immediate treatment would have been missed

"

The 2017 Guidelines of the American Thyroid Association (ATA) for the diagnosis and management of thyroid disease during pregnancy and postpartum recommend that pregnant women requiring treatment for thyroid dysfunction are identified using a case-finding method that takes account of their history of thyroid dysfunction and an assessment of current signs and symptoms. A new paper published in *Clinical Endocrinology* challenges these recommendations.

Thyroid hypofunction during pregnancy is associated with poor pregnancy outcomes, but can be treated easily if identified. However, "symptoms of endocrine hypofunction sometimes do not correlate with seriously abnormal biochemical values," explains Victor Pop, corresponding author of the study. Pop and his colleagues felt that there was a lack of evidence to support the ATA's recommendation. Therefore, they assessed whether symptoms of thyroid hypofunction could be used to identify pregnant women with hypothyroidism that needed treatment in a group of 2,198 women from the Netherlands.

At 12 weeks gestation, the women were asked to complete a series of questionnaires regarding demographic and obstetric features, lifestyle and symptoms commonly associated with hypothyroidism. Blood samples were taken to determine levels of thyroid-stimulating hormone, free $\mathrm{T_4}$ and thyroid peroxidase antibodies. The thyroid function of the women was categorized based on standard reference ranges.

The questionnaire results identified 302 women with high hypothyroid scores, of whom

just five had overt or subclinical hypothyroidism. Using the analysis of thyroid hormone levels, Pop and co-workers identified 15 women with thyroid hypofunction who required treatment. Using the ATA recommendation for case finding, just eight of these women would have been detected; therefore, 47% of the women who required immediate treatment would have been missed. "Our paper confirms that there are no signs and symptoms during early pregnancy typical for thyroid dysfunction," says Pop. "The statement of the recent guidelines is therefore not valid."

"The work is slowly pushing forward to convince clinicians and researchers that in every pregnant woman, thyroid function should be assessed during early gestation," concludes Pop.

Claire Greenhill

ORIGINAL ARTICLE Pop, V. J. et al. Thyroid disease symptoms during early pregnancy do not identify women with thyroid hypofunction that should be treated. Clin. Endocrinol. http://dx.doi.org/10.1111/cen.13433 (2017)

FURTHER READING Korevaar, T. I. M. et al. Thyroid disease in pregnancy: new insights in diagnosis and clinical management. Nat. Rev. Endocrinol. http://dx.doi.org/10.1038/nrendo.2017.93 (2017)

