



SUBMIT

Editorial

Overt hypothyroidism in pregnancy: Can we consider medical termination of pregnancy?

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Thyroidology has made rapid strides in recent times. The rapidity of advances has also brought with it certain controversies regarding the optimal management of thyroid disorders in pregnancy. Detailed guidelines for managing thyroid dysfunction during pregnancy are available from India as well as abroad.¹⁻³ These documents describe the management of various thyroid disorders, including maternal hypothyroidism and its impact on maternal, fetal, and long-term neuro-psychological effects.

Most guidelines, however, are silent on one vexing aspect of management: Whether or not to, and when to advise medical termination of pregnancy (MTP) to an antenatal mother presenting in early pregnancy with overt hypothyroidism (OH). The Indian Thyroid Society guidelines do mention that maternal hypothyroidism is in itself not an indication for MTP. However, the guidelines do not expand upon this fairly common clinical dilemma.

of subclinical hypothyroidism (SCH) and OH is lower. The commoner cause of hypothyroidism is Hashimoto's thyroiditis. Other causes include iodine deficiency, treatment with radioactive iodine ablation or by surgery, and lymphocytic hypophysitis.

A report from Chennai revealed a prevalence of 2.8% of SCH among 493 women without known thyroid disease. In the same study, 5 out of 560 screened women had a history of already diagnosed thyroid disease. The thyroid peroxidase antibody positivity was 57.2% in antenatal women with SCH and 7% in euthyroid antenatal women.⁴ A similar report from Mumbai, studying 483 consecutive pregnant women in their first trimester, who were followed till delivery, found a 4.8% prevalence of hypothyroidism and 64% thyroid antibody positivity.⁵ Researchers in Delhi, following up 633 women from second trimester onwards, found a higher prevalence of 4.5% of OH, along with high risk of fetal and maternal complications.⁶

HYPOTHYROIDISM IN PREGNANCY

The epidemiology of hypothyroidism has been discussed earlier in [EMM] Unnikrishnan, et al.⁷ Hypothyroidism is especially frequent in going women of child-bearing age. Hence, it follows that hypothyroidism will be a frequent comorbid condition in pregnancy.

While thyroid autoantibody positivity is seen in a large percentage of women of child-bearing age, the prevalence

THE ENDOCRINOLOGIST'S DILEMMA

Clinical symptoms of hypothyroidism are non-specific, and may be confused with routine obstetric complaints. Yet, other patterns may be asymptomatic. The diagnosis of hypothyroidism in pregnancy, therefore, depends on biochemical thyroid function tests.

As some centers screen for hypothyroidism in high-risk patients and other centers opt for universal screening, the chances of encountering patients with "new" OH, who are diagnosed during first or second trimester of pregnancy, are significant.

It is not uncommon for an endocrinologist to receive a referral from an obstetrician, requesting opinion for management of an antenatal patient with double digit thyroid stimulating hormone (TSH) values. Should the endocrinologist, knowing the potential adverse



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Thyroid Disease in Pregnancy

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- Thyroid cancer
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FEATURE ARTICLE



The Philippine Thyroid Diseases Study (PhilTiDeS 1): Prevalence of Thyroid Disorders Among Adults in the Philippines

The Philippine Society of Endocrinology and Metabolism (PSEM) PhilTiDeS Working Group
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Abstract

Background. The national prevalence of goiters in the Philippines was 3.7% in 1987 and 6.7% in 1993. Since then, there has been no follow-up survey on goiter prevalence, nor has there been any national survey on the prevalence of abnormal thyroid dysfunction. The PhilTiDeS is a survey on the prevalence of both goiters and thyroid disorders in the Philippines

Objectives. To determine the prevalence of various categories of abnormal thyroid dysfunction among the Filipino non-pregnant adult population and to describe the prevalence of thyroid enlargement in the Philippines in relation to thyroid dysfunction status.

Materials and Methods. The PhilTiDeS was a substudy of the 2008 National Nutrition and Health Survey (NNHS), which covered all 17 regions and 80 provinces of the Philippines. It included all Filipino adults 20 years and older, who are non-pregnant and non-lactating. A standard questionnaire was used to collect data on previous diagnosis and current treatment for thyroid disorders, and neck examination by trained field personnel was done to assess the presence of goiter. Blood was extracted, processed and sent to an accredited laboratory for free T4 and TSH testing using micro-particle enzyme immunoassay.

Results. A total of 4897 persons had thyroid function tests. Of these, 417 (8.53%) had thyroid function abnormalities with the most common abnormality being subclinical hyperthyroidism occurring in 5.33%. The other categories had the following prevalence: true hyperthyroidism 0.61% ; true hypothyroidism 0.41%; and subclinical hypothyroidism 2.18% . Majority of the population 4480 (91.47%) had normal thyroid function tests.

Of those with subclinical hyperthyroidism, 55% are females with mean age of 48 years (95% CI 45.9-50.1 years) compared with the volunteers with normal thyroid function who were younger (mean age of 43.1, 95% CI 42.5-43.6 years).

Out of the 7,227 volunteers who responded to the survey and clinical examination, a total of 674 (8.9%) had goiters. Out of the 674 subjects with goiters, 379 had diffuse enlargement (56%) while the rest had nodular goiter (44%). Among the sub-population (n= 4897) who underwent thyroid function testing, 9% of those with normal thyroid function tests have goiters.

Conclusion. The prevalence of thyroid function abnormalities in the Philippines is 8.53% with the greatest proportion of volunteers having subclinical thyroid disease. There is a low prevalence of both true or overt hyperthyroidism and hypothyroidism. In the larger survey, it was found that 8.9% of volunteers who were examined had goiters. The etiology of these goiters will need to be ascertained in future studies.

Keywords: prevalence, thyroid diseases, goiter

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Box 3: Disorders associated with Graves' disease

Autoimmune disorders
Endocrine: Addison's disease, type 1 diabetes mellitus, primary gonadal failure, hypophysitis, Hashimoto's thyroiditis
Nonendocrine: celiac disease, vitiligo, alopecia areata, myasthenia gravis, pernicious anemia, immune thrombocytopenic purpura, rheumatoid arthritis

Other disorders
Hypokalemic periodic paralysis (particularly in Asian males), mitral valve prolapse

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