



Title **Thyroid Screening in Pregnant Women**

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<http://medicaldev.moh.gov.my/uploads/26.thyroid.pdf>

Aim

To determine the safety, effectiveness, and cost effectiveness of thyroid screening program in pregnant women.

Conclusions and results

Screening is defined as testing for a disease when there are no signs or symptoms, with the goal to improve health outcomes. Given the potential for serious adverse events associated with maternal thyroid disease and the apparent benefits of treatment, many have recommended routine thyroid function screening in pregnancy. The groups of physicians performing most prenatal care, obstetrician-gynecologists, however, have not advocated routine screening for thyroid disease in pregnancy. Professional associations of endocrinologists have taken varying views, with evidence-based review panels concluding that evidence is insufficient to mandate routine screening, and other expert panels advocating screening. Groups that gathered as part of two multidisciplinary conferences that included endocrinologists, obstetricians, and other experts, concluded that the evidence is insufficient for routine thyroid screening in pregnancy.

Another point of discussion concerns the optimal timing for screening, since changes in thyroid peroxidase (TPO) occur due to immunological adaptations, and serum thyroid stimulating hormone (TSH) decreases in 20% of women at the end of the first trimester. Until larger, properly randomized controlled trials show a beneficial impact of thyroxin treatment on pregnancy outcome, the discussion on the validity of screening will continue.

Recommendations

Universal screening of pregnant women for thyroid disease is not supported by adequate, high-quality evidence. Although current evidence might not confirm the benefits of universal screening for thyroid dysfunction (primarily hypothyroidism), we recommend case finding by measuring TSH in specific groups of patients,

including women with: history of hyperthyroid or hypothyroid disease, postpartum thyroiditis (PPT), or thyroid lobectomy; family history of thyroid disease; goiter; thyroid antibodies; symptoms or clinical signs suggestive of thyroid underfunction or overfunction, eg, anemia, elevated cholesterol, and hyponatremia; type 1 diabetes; other autoimmune disorders; infertility; previous therapeutic head or neck irradiation; and history of miscarriage or preterm delivery.

Methods

The literature was systematically reviewed. PubMed, ProQuest, and MEDLINE via EBSCO were searched, as were websites for HTA agencies and relevant societies. Articles retrieved were cross-referenced according to topic. The studies reviewed were systematic reviews, guidelines, and observational studies.

Further research/reviews required

Further clinical research is warranted to provide evidence of the effectiveness of routine screening for thyroid disease in pregnancy.