

Thyroid Diseases in Pregnancy

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Abstract

Introduction: Changes in thyroid function in pregnancy encompass both hyper- and hypothyroidism. Failure to maintain euthyroidism may place both mother and foetus at higher risk of adverse obstetrical outcomes. This review examines the differences between physiological and pathological thyroid dysfunction during pregnancy and their management. **Methods:** Data were obtained from relevant clinical studies and review articles listed in MEDLINE. Additional cross-references from selected articles were identified. **Results:** In hyperthyroidism, the challenge lies in differentiating gestational transient thyrotoxicosis (GTT) from actual pathological states during the first trimester. GTT is thought to be due to elevation of isoforms of human chorionic gonadotropin (hCG) which may exert potent thyrotrophic effects. While thionamides are safe, the lowest possible dose should be used together with close monitoring of maternal thyroid function in order to avoid over-treatment. Surgery for thyroid nodules may be safely performed during the second trimester. Conversely, diagnosing hypothyroid states, particularly subclinical hypothyroidism and postpartum thyroiditis (PPT), require a high index of suspicion. High levels of thyroid peroxidase antibodies (TPOAb) and thyroid stimulating hormone (TSH) in early pregnancy may be predictive of PPT and subsequent permanent hypothyroidism. Clinicians must recognise the need to increase thyroxine replacement as maternal hypothyroidism may adversely affect the IQ scores of children. The association between thyroid autoimmunity and recurrent abortions remain unclear. **Conclusion:** Regardless of the aetiology of thyroid dysfunction, the key to management lies in individualised therapy in close collaboration with the obstetrician.

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