

NR 565 Week 5 Discussion: CPGs Related to Endocrine Disorders

Last Name	Client from Week 5 Lesson
S – V	Pua Leilani

Describe your assigned client's situation. Why are they presenting to the clinic? What medications are they currently taking?

Pua Leilani, a 36-year-old female, presented to the clinic to discuss if the medication she is taking for hyperthyroidism is appropriate for pregnancy. She is planning on starting IVF therapy in two months and needs to verify if the medication is safe to take before becoming pregnant.

Eight months ago, she was diagnosed with hyperthyroidism, achieved the euthyroid state, and was placed on a maintenance dose. Lab values indicate a normal TSH level, T3, T4 levels, CBC, and LFTs within normal limits. PMH includes hyperthyroidism (Grave's Disease), and the patient takes methimazole (Tapazole) 5 mg PO daily. Upon physical exam, the NP assessed a normal thyroid gland and considered the proper antithyroid medication for conception.

Assess the applicable clinical practice guideline (CPG) for your assigned client linked on the same page in the lesson where the client case is located. What treatment is recommended by the CPG for your client's situation?

Hyperthyroidism occurs when the thyroid gland produces and releases higher levels of thyroid hormones than the body needs. This process speeds up an individual's metabolism and other body functions. Pregnant women with hyperthyroidism require adequate evaluation because they have an increased risk of miscarriage, preeclampsia, preterm birth, and heart failure of its adverse effects on both the mother and the fetus, the rapid recognition and proper management of cases are imperative to prevent significant complications (Petca et al., 2023). The therapeutic management of hyperthyroidism in pregnant women requires adequate consideration due to the challenging circumstances of fluctuating thyroid hormone levels during pregnancy. Management guidelines recommended by the CPG (2011) for the treatment of hyperthyroidism in pregnant women state that antithyroid drug therapy should be used for hyperthyroidism because Grave's Disease requires treatment during pregnancy. Propylthiouracil (PTU) should be used when antithyroid drug therapy is started during the first trimester. Propylthiouracil (PTU) is the medication of choice in treating hyperthyroidism during the first trimester of pregnancy. The American Thyroid Association and American Association of Clinical Endocrinologists suggest that patients taking methimazole who decide to become pregnant obtain pregnancy testing at the earliest suggestion of pregnancy and be switched to propylthiouracil as soon as possible in the first trimester and changed back to methimazole at the beginning of the second trimester (Bahn et al., 2011). Because the patient is planning on starting IVF therapy to get pregnant, it is necessary to switch her medication from methimazole to Propylthiouracil (PTU). However, the inadequate control of thyroid function due to the switching between Methimazole (MMI) and Propylthiouracil (PTU) is concerning because of differences in pharmacokinetics and uncertainty