Experts issue recommendations for treating thyroid dysfunction during and after pregnancy

August 10 2012

The Endocrine Society has made revisions to its 2007 Clinical Practice Guideline (CPG) for management of thyroid disease during pregnancy and postpartum. The CPG provides recommendations for diagnosis and treatment of patients with thyroid-related medical issues just before and during pregnancy and in the postpartum interval.

Thyroid hormone contributes critically to normal fetal brain development and having too little or too much of this hormone can impact both mother and fetus. Hypothyroid women are more likely to experience infertility and have an increased prevalence of anemia, gestational hypertension and postpartum hemorrhage. If left untreated, maternal hypothyroidism is associated with premature birth, low birth-weight and neonatal respiratory distress. Higher than normal thyroid hormone levels are associated with increased fetal loss.

"Pregnancy may affect the course of thyroid diseases and conversely, thyroid diseases may affect the course of pregnancy," said Leslie De Groot, M.D., lead researcher from the University of Rhode Island. "Pregnant women may be under the care of multiple health care professionals including obstetricians, nurse midwives, family practitioners and endocrinologists making the development of guidelines all the more critical."

Revisions from the CPG include:

- Caution should be used in the interpretation of serum free thyroxine (T4) levels during pregnancy and each laboratory should establish trimester-specific reference ranges for pregnant women using a free T4 assay. The non-pregnant total T4 range (5-12 μg/dL – 50-150 nmol/L) can be adapted in the second and third trimesters by multiplying this range by 1.5-fold. Alternatively, the free T4 index appears to be a reliable assay during pregnancy;
- Propylthiouracil (PTU), if available, should be the first-line drug for treatment of hyperthyroidism during the first trimester of pregnancy, because of the possible association of methimazole (MMI) with congenital abnormalities. MMI may also be prescribed if PTU is not available or if a patient cannot tolerate or has an adverse response to PTU. Recent analyses by the FDA indicate that PTU may rarely be associated with severe liver toxicity. For this reason, clinicians should change treatment of patients from PTU to MMI after completion of the first trimester;
- Breastfeeding women should maintain a daily intake of 250 μg of iodine to ensure breast-milk provides 100 mcg iodine per day to the infant;