Response to the “Viewpoint” article regarding thyroid-screening in pregnancy

TO THE EDITORS: Having read the “Viewpoint” article on thyroid screening in pregnancy, I would like to put the “to screen or not to screen” controversy into perspective. In my opinion, there really should be no debate about the issue of mandatory early prenatal testing for hypothyroidism. The authors correctly point out that hypothyroidism is the second most common condition that affects women of reproductive age. The frequency of the diagnosis reported in different studies will depend on the thyroid-stimulating hormone cutoff (2.5, 3.0, or >4.0 mIU/mL) and whether antithyroid antibodies were tested. Depending on the parameters used, the incidence of hypothyroidism reported in pregnancy varies greatly and can be estimated to be 4.0-15.5%. Because in many studies thyroid screening tests were minimal and consist of TSH and free T4 only, the frequency of hypothyroidism in pregnancy may be underestimated.

The pregnant woman with hypothyroidism has been demonstrated to be at increased risk for miscarriage and other major gestational morbidities. Studies on the association of hypothyroidism with an increased risk of having a baby with some degree of intellectual or developmental impairment are conflicting and differ methodologically.

On the other hand, the cost of screening for hypothyroidism is extremely small on a per-patient basis; in the United States, a significant percentage of screening costs would be covered by health insurance plans.

According to compiled data from our practice (average reimbursements for thyroid tests performed in-house in our laboratory), the cost of minimal thyroid screening (which we believe to be inadequate) is $24.21 per patient. The per-patient cost of a comprehensive thyroid evaluation that consists of measurements of thyroid-stimulating hormone, total and free T4 and T3, and antithyroid peroxidase and antithyroglobulin antibodies is $87.20. Comprehensive thyroid screening is obviously preferable in that it is able to identify several different etiologic types of hypothyroidism, Hashimoto’s thyroiditis in particular.

Comprehensive testing is inexpensive and casts a wide net in the identification of hypothyroid women early in pregnancy, when treatment is the most critical. With a small investment of <$100/per woman, the incidence of certain recognized gestational morbidities could be reduced. The question of the incidence of intellectual impairment and the effect of treatment on the offspring of women with an untreated hypothyroidism is not answered completely, because there are confounding variables that could influence outcome.

Irrespective of cost, if it is possible to reduce intellectual compromise in any child by treating maternal hypothyroidism, it is worth doing so. The potential gain of early diagnosis and intervention in avoiding untoward fetal and maternal events that are associated with maternal hypothyroidism clearly outweighs the financial and emotional costs of poor outcomes that result from undiagnosed and untreated gestational hypothyroidism. Because there is really no “down side” to comprehensive thyroid screening, either before conception or in the early first trimester, there is no reason that it should not be recommended.

Hugh D. Melnick, MD
Advanced Fertility Services
1625 Third Ave.
New York, NY 10128
HDM46@aol.com
The author reports no conflict of interest.

REFERENCES
2. Jacob JJ. Subclinical hypothyroidism in the first trimester of pregnancy in north India. Indian J Endocrinol Metab 2013;17(suppl1):s160-1.

© 2015 Elsevier Inc. All rights reserved. http://dx.doi.org/10.1016/j.ajog.2015.01.002