Thyroid Disorder Guidelines Miss ACOG’s Mark

BY PATRICE WENDLING
Chicago Bureau

VERONA, ITALY — Newly developed consensus guidelines recommend thyroid-function screening in high-risk pregnant women, but stop short of calling for universal screening.

An international task force, under the auspices of the Endocrine Society, examined 10 key topics related to pregnancy and thyroid. The end result was an 86-page, single-spaced document encompassing 35 recommendations, many of which were reached after a diplomatic search for compromise. Dr. Daniel Glinoer said at a joint meeting of the Italian Association of Clinical Endocrinologists and the American Association of Clinical Endocrinologists.

The difficulty stemmed from the paucity of prospective randomized trials in the field, the contrasting approaches of endocrinologists and obstetricians on some controversial issues, and the appearance of additional data even as the task force was writing the guidelines. “Altogether, this effort represented a tremendous challenge that was much more difficult than anticipated,” said Dr. Glinoer, who represented the European Thyroid Association on the task force and is chief of the thyroid investigation clinic at the Centre Hôpitalier Universitaire Saint-Pierre, Brussels.

Despite compromises on many recommendations, the American College of Obstetricians and Gynecologists (ACOG) opted not to endorse the final guidelines. Dr. Sarah Kilpatrick, who represented ACOG on the task force, acknowledged that a great deal of time and work went into the guidelines.

“Unfortunately, the data available are not consistently good, and there are still many differences of opinion between endocrinologists and perinatologists about how to interpret the data and best manage pregnant women,” Dr. Kilpatrick, professor and head of the department of obstetrics and gynecology at the college of medicine at the University of Illinois at Chicago, said in an interview. “ACOG did not endorse these guidelines because many of the recommendations made by the guidelines were based on poor evidence with a recommendation level of inconclusive.”

For screening purposes, the task force identified high-risk women as those with a personal history of thyroid or autoimmune disorders; a family history of thyroid disorders; or a personal history of infertility or preterm delivery.

For maternal hyperthyroidism, which affects 2.5%-3% of preg-
nant women, the task force recommended a targeted diagnostic approach at the first prenatal visit or at diagnosis of pregnancy. The preconception thyroxine dosage should be adjusted according to the appearance of additional data that may raise concern about disease if there are severe adverse reactions to ATD therapy, if per-
sonal history with uncontrolled hyperthyroidism. The time to perform surgery is the second trimester.

There is no evidence that treating subclinical hyperthyroidism improves pregnancy outcome, and it could potentially adversely affect the fetus, he said.

Mild Hyperthyroidism May Be Best Bet in Graves’ Pregnancy

BY HEIDI SPLETE
Senior Writer

PHOENIX — Infants are rarely born with suppressed thyroid function if their mothers have Graves’ disease but continue to take lower doses of thyroid medication during pregnancy, based on data from 249 pregnant Graves’ disease patients.

Maternal free thyroid (FT3) levels just above normal (at least 1.9 ng/dL) were associated with normal FT3 levels in the newborn, Dr. Naoko Momotani said at the annual meeting of the American Thyroid Association.

Although previous research has suggested that a mother’s thyroid hormone level is linked to her newborn’s health, this study is the first to show such a relationship, said Dr. Momotani of the Tokyo Health Service Association in Tokyo.

Graves’ disease involves overactivity of the entire thyroid gland, which can cause underactivity of the thyroid in the developing fetus. When a pregnant woman with Graves’ disease is on antithyroid medication, the TSH receptor antibodies are transferred to the fetus, which prevents fetal hyperthyroidism.

“The drugs that are ideal for the mother might be too much for the fetus,” Dr. Momotani said.

Keeping pregnant Graves’ disease patients in a mild hyperthyroid state may be a noninvasive way to care for these women and prevent thyroid problems in the fetus, she said.

The women in the study took antithyroid drugs throughout pregnancy. The highest reported maternal FT3 level was 4.1 ng/dL. Overall, 41 fetuses had elevated TSH, but none had a visible goiter at birth.

There were no cases of below-normal FT3 levels and one case of elevated TSH in an fetus among women whose FT3 levels were greater than 1.9 ng/dL (that is, higher than the upper normal range of 1.2-1.9 ng/dL).

By contrast, a total of 102 mothers had normal free T3 levels (0.6-1.2 ng/dL) at the time of delivery, and 23 of their infants had low FT3, and/or high TSH levels at birth. But only 1 of these 23 infants had an elevated TSH level when the infants were screened for congenital hypothyroidism. One infant had both suppressed TSH and normal free T3 levels at birth, which suggested central hypothyromidism, and the mother’s FT3 in this case was above the normal level.

It is important to remember that the range of FT, values in women with Graves’ disease varies, and some infants born to mothers with Graves’ disease who were screened for congenital hypothyroidism were not found to have any problems.

The 36 patients conceived their pregnancy a mean of 5 years after their transplants, although this ranged from as little as 0.2 years to as much as 15 years. They had an average age of 28 years at conception, ranging from 18 to 39 years.

During pregnancy, hypertension was the most common comorbidity (43%) among the women, followed by infections (14%), preeclampsia (11%), and gestational diabetes (3%).

Nine of the mothers (23%) died after pregnancy, although all of the deaths occurred more than 2 years postpartum. These deaths were attributed to cardiac arrest (two), acute rejection (two), and in one patient each, vasculopathy, atherosclerosis, sepsis, lymphoma, and noncompliance. The other 27 mothers (75%) had adequate graft function at follow-up.

According to data collected by the U.S. Organ Procurement and Transplantation Network, the 5-year Kaplan-Meier patient survival rate for heart transplants performed in women between 1997 and 2004 (pregnancies not considered) is just over 69%.

The possibility of maternal death unrelated to pregnancy should be included during prepregnancy counseling, Ms. Coscia advised in her poster at the congress. Patients with an echocardiogram abnormality have the highest mortality risk.

Ms. Coscia advised in her poster at the congress. Patients with an echocardiogram abnormality have the highest mortality risk.