Letter to the editor

European Thyroid Association guidelines in comparison with the American Thyroid Association and Endocrine Society practice guidelines for the screening and treatment of hypothyroidism during pregnancy

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Dear Editor,

It is with great interest that we read the detailed and well enunciated comparison between the American Thyroid Association (ATA) and the Endocrine Society (ES) practice guidelines for the screening and treatment of hypothyroidism during pregnancy that was published in the last issue of Hormones.[1] As both screening and treatment of hypothyroidism during pregnancy remain controversial, another set of practice guidelines have recently been developed by the European Thyroid Association (ETA).[2]

As per the rationale set forth by Amouzegar et al,[1] we reviewed the ETA guidelines regarding screening and treatment of hypothyroidism during pregnancy. These guidelines have been developed by a taskforce nominated by the ETA guideline board. The GRADE system had been applied. The guidelines include two recommendations concerning screening and a larger number of recommendations concerning the treatment of hypothyroidism (recommendations 6-8 for iodine supplementation, recommendation 9 for adverse effects, recommendations 10-13 for effects of treatment and recommendations 14-21 for practical management).

Regarding screening, the ETA guidelines recognize the fact that a targeted approach to screening thyroid function is not adequate, as a large number of women with thyroid dysfunction (33-81%) will remain undiagnosed. It is also underlined that levothyroxine (LT_4) replacement may have beneficial effects on obstetric outcome. Though universal screening is not yet recommended in the ETA guidelines due to lack of evidence (similarly to both the ATA and ES guidelines[3,4]), an extra note has been added stating that the majority of authors do recommend universal screening. This is the first time that universal screening is advised, though not as an official recommendation.

Regarding treatment, the ETA guidelines are the only ones to recommend LT_4 in all women with subclinical hypothyroidism before or during pregnancy. They also add that treatment with LT_4 can be considered for isolated hypothyroxinaemia, in the first trimester of pregnancy, though the ATA recommends the opposite and the ETA makes no recommendation. LT_4 is the treatment of choice in the ETA guidelines, as in both the other guidelines, with the goal being

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the trimester-specific TSH thresholds. A starting dose for newly diagnosed patients is suggested (1.20 μg/kg/day) as well as a 25-50% increase of LT_4 in those already on treatment pre-pregnancy. The ETA guidelines also underline the need to ensure iodine intake before and during pregnancy, while assessments should take place every 4-6 weeks during the first trimester and once per trimester thereafter. In accordance with the other guidelines, it is advisable to reduce the LT_4 dose to pre-conception levels after delivery. In women diagnosed during pregnancy, LT_4 can be discontinued if TSH is <5 mU/l and thyroid autoimmunity is not present; a re-assessment can be made six weeks later.

As the ETA guidelines provide different recommendations at various points, the sense of frustration and uncertainty among clinicians, as described by Amouzegar et al, is further heightened. It seems that the ETA guidelines were constructed on the basis that, in the absence of high-quality evidence, the rationale that "potential benefits of screening or treatment must outweigh costs or risks" has to be followed. In our opinion, this set of guidelines better reflects everyday clinical practice, incorporating the principles of "primum non nocere" and "achieve the best that you can do".

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