AIT - AME Statement

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Hyperthyroism and Pregnancy

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Is a TSH determination advisable as a screening test in all pregnant women?

ANSWER

The answer is definitely yes, even though not only TSH but also FT4 should be measured in all pregnant women (universal screening).
A TSH determination should be considered for women who are planning a pregnancy, as well.

Is iodine supplementation advisable in a pregnant woman with subclinical hyperthyroidism?

ANSWER

Iodine supplementation is advisable in all pregnant women, provided that it does not exceed twice the daily recommended nutrient intake (RNI) for iodine

(< 500 µg/day iodine)

Which is the diagnostic approach to a pregnant woman with a low serum TSH during the first trimester?

ANSWER

Search for:

- clinical features of hyperthyroidism (including personal or family history of autoimmune diseases and GTT)
- serum FT4
    - If FT4 demonstrates a hyperthyroidism, search for anti-TSHR antibodies in order to distinguish between Graves' disease and gestational thyrotoxicosis (GTT)

Which may be the consequences of untreated hyperthyroidism on the mother and the fetus?

ANSWER

A 10-fold increase in preterm delivery and 3, 10 and 20-fold increase in preeclampsia, thyroid storm and congestive heart failure, respectively

Untreated hyperthyroidism has been also associated with intrauterine growth restriction, low birth weight, fetal loss and miscarriage

What is the management of gestational thyrotoxicosis and hyperemesis gravidarum?

ANSWER

Hyperemesis gravidarum and GTT are usually transient and self-limited conditions, spontaneously recovering by midgestation

Medical treatment should be limited to pregnant women with severe and persistent hyperthyroidism

What to do if 131-I has erroneously been given to a pregnant women?

ANSWER

The patient should be informed of the low radiation danger risk to the fetus

There are not univocal data in literature to recommend termination of pregnancy after radioiodine exposure

Which is the anti-thyroid drug of first choice for a pregnant women with hyperthyroidism?

ANSWER

During the first trimester PTU is advised (50-200 mg daily)

In the second and the third trimester the treatment should be shifted to MMI (5 to 20 mg daily)

Be careful not to induce subclinical hypothyroidism

Is there a role for the association of anti-thyroid drug (ATD) and levothyroxine (L-T4) in pregnant women with hyperthyroidism ?

ANSWER

A block-replace therapy with both LT4 and ATD should not be used in pregnancy

Are beta-blockers contraindicated during pregnancy?

ANSWER

The transient use of beta-blockers is not contraindicated during pregnancy

How anti-thyroid drug treatment should be monitored during pregnancy?

ANSWER

Anti-thyroid drug treatment should be monitored every 2-4 weeks with the determination of serum FT4 and TSH

Liver function and blood cell count should be controlled with a less stringent schedule

What is the clinical role of TRAb measurement and when these antibodies should be tested in pregnancy?

ANSWER

TRAb should be measured during early pregnancy and at the 22-26th week of gestation in women:

1) who are taking ATD for active Graves' disease
2) women who have been recently treated with radioiodine

TRAb should be measured at the 22-26th week of gestation only, in women:

1) previously cured with the use of ATD and with no evidence of Graves' disease relapse;
2) women treated with thyroidectomy at least one year before the onset of pregnancy

When should thyroidectomy be considered in a hyperthyroid pregnant woman?

ANSWER

Indications for thyroidectomy are:

- serious adverse reactions to thionamides;
- persistent requirement of a high dose thionamide regimen;
- non-compliance of the patient;
- local compressive symptoms due to large hyperfunctioning goiters

Surgery, when indicated, should be performed in the second trimester

Which monitoring to detect hyper or hypothyroidism in the fetus?

ANSWER

Fetus should be monitored monthly with fetal heart rate recording and ultrasound assessment of fetal morphology

A condition of fetal hyperthyroidism is suggested by the presence of tachycardia (>160 bpm after the 20th gestational week), accelerated bone maturation, goiter, cardiac failure or hydrops

A condition of fetal hypothyroidism may be suspected on the basis of intrauterine growth retardation, delayed bone maturation, polyhydramnios, and/or goiter

Cordocentesis in the fetuses of pregnant women treated for Graves'disease: When and why?

ANSWER

The direct measurement of FT4 and TSH in fetal serum is obtained by umbilical blood sampling (cordocentesis)

Consider only if the diagnosis of fetal hypothyroidism or hyperthyroidism is not certain from clinical data and if information gained may significantly change the treatment (high risk of miscarriage)

If hyperthyroidism persists or relapses in the post-partum period, how should the patient be treated during lactation?

ANSWER

Treatment with thionamides (MMI < 20 mg/d) may be considered during lactation

The mother should take her thionamide dose just after breast feeding

Which neonatal management is recommended for a baby born to a hyperthyroid mother?

ANSWER

Newborns of mothers with GD should be evaluated as follows:

1) test serum TRAb level in the cord blood at delivery;

2) measure FT4, FT3 and TSH in neonatal serum within the first 24-48 hours of life

3) repeat the assessment of fetal thyroid function after the first week of life, even in a fetus that was euthyroid at birth

4) repeat the evaluation of the fetal thyroid function during the second month of life