

FOGSI Endocrinology Committee



Hypothyroidism in Pregnancy

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Trimester Specific TSH cut-offs

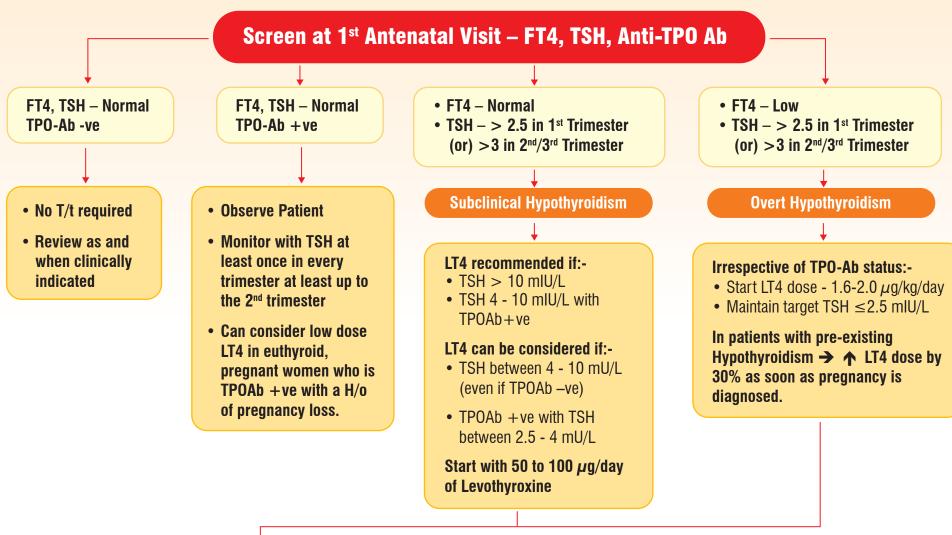
Risks of Hypothyroidism in Pregnancy

Disease Burden of Hypothyroidism in Pregnancy
Worldwide = 1.5 – 4%
India = 11%

Trimester	Upper limit of TSH Range
1 st Trimester	2.5 mIU/L
2 nd Trimester	3 mIU/L
3 rd Trimester	3 mIU/L

Maternal	Foetal & Neonatal
Anemia	Preterm Birth
Gestational Hypertension	Low Birth Weight
Abruptio Placentae	Respiratory Distress
Post Partum Haemorrhage	Neurocognitive Impairment
Abortion	

Approach to a Case



Regular TSH monitoring

- ~ every 4-6 weeks until mid-gestation (AND)
- at least once near 28 weeks gestation

Adjust LT4 dose as per TSH.

In general, LT4 dose adjustments of 12.5–25 mcg/d are made, either up or down depending on whether TSH is high or low

Post-Partum Care:-

- Patient should be reverted back to the pre-pregnant dosage of LT4 → recheck after 6 weeks.
- Some women in whom LT4 is initiated during pregnancy may not require LT4 postpartum
- → Such women are candidates for discontinuing LT4 (especially if LT4 dose ≤50 mcg daily)
- If LT4 is discontinued → recheck after 6 weeks.
- If TPOAb +ve → annually monitor TSH.

Other Key Practice Points

• TPOAb testing in pregnancy should be done only once. • LT4 to be taken 60 minutes before breakfast or at bedtime (> 3 hrs after evening meal) for optimal, consistent absorption. • In hypothyroid women treated with LT4 who are planning pregnancy, serum TSH should be evaluated preconception, and LT4 dose adjusted to achieve a TSH value between the lower reference limit and 2.5 mU/L • In patients in whom LT4 dose requirements are much higher than expected, evaluation for GI disorders such as Helicobacter pylori—related gastritis, atrophic gastritis, or celiac disease should be considered. Furthermore, if such disorders are detected and effectively treated, re-evaluation of thyroid function and LT4 dosage is recommended. • Use of different levothyroxine products may be associated with altered serum TSH levels. A change in brand should be followed by a re-evaluation of the serum TSH levels at steady state. • Postpartum thyroiditis (PPT) occurs in upto 10% of all pregnancies and may have a hyperthyroid phase. It may begin from 6 weeks to 6 months post delivery and sometimes a year later. It may also be triggered by a miscarriage occurring as early as 6 weeks. Women who have T1DM or are TPO +ve during the 1st trimester or postpartum depression should have their TSH monitored at 3 and 6 months post-partum.

References: 1. Lazarus J, Brown RS, Daumerie C, Hubálewska-Dydejczyk A, Negro R, Vaidya B. 2014 European thyroid spociation guidelines for the management of subclinical hypothyroidism in pregnancy and in children. Eur Thyroid J. 2014 Jun;3(2):76-94. 2. FOSSI Medical Disorders in Pregnancy – Vol. 2 (Jan 2021) https://www.fogsi.org/wp-content/uploads/com/mittee - Thyroid J. 2014 Jun;3(2):76-94. 2. FOSSI Medical Disorders in Pregnancy – Vol. 2 (Jan 2021) https://www.fogsi.org/wp-content/uploads/com/mittee - 2020-activities/thyroid-guideline-2019.pdf (accessed on 08-09-2022) 4. De Groot 1. Abalovich M, Alexander EK, Amino N, Barbour L, Cobin RH, Eastman CJ, Lazarus JH, Luton D, Mandel SJ, Mestman J, Rovet J, Sullivan S. Management of Thyroid dystunction during pregnancy and postpartum: an Endocrino Metab. 2012 Aug;7(8):263-85. doi: 10.127(0):2-2015-205. 6. S. Sahay RK, Nagesian N, Sayari AR, Martin M, Eastward S, Lazarus JH, Luton D, Mandel SJ, Mestman J, Brovet J, Sullivan S. Management of Thyroid dystunction in pregnancy produced in the Part of the

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