Flow Chart for Treatment of Hypothyroidism in Pregnancy and postpartum period based on S.TSH Values

1

<2.5mIU/l (I tri) or <3mIU/l (II & III tri)

No treatment

2

2.5-10mIU/l (I tri) or 3-10mIU/l (II & III tri)

25 ug L-thyroxine/day during pregnancy

No treatment required in postpartum period

3

≥10mIU/l (any tri)

50 ug L-thyroxine/day

Same dose to be continued in postpartum

4

Pregnant women on treatment for Hypothyriodism before pregnancy

L-thyroxine dose to be modified according to 2 & 3

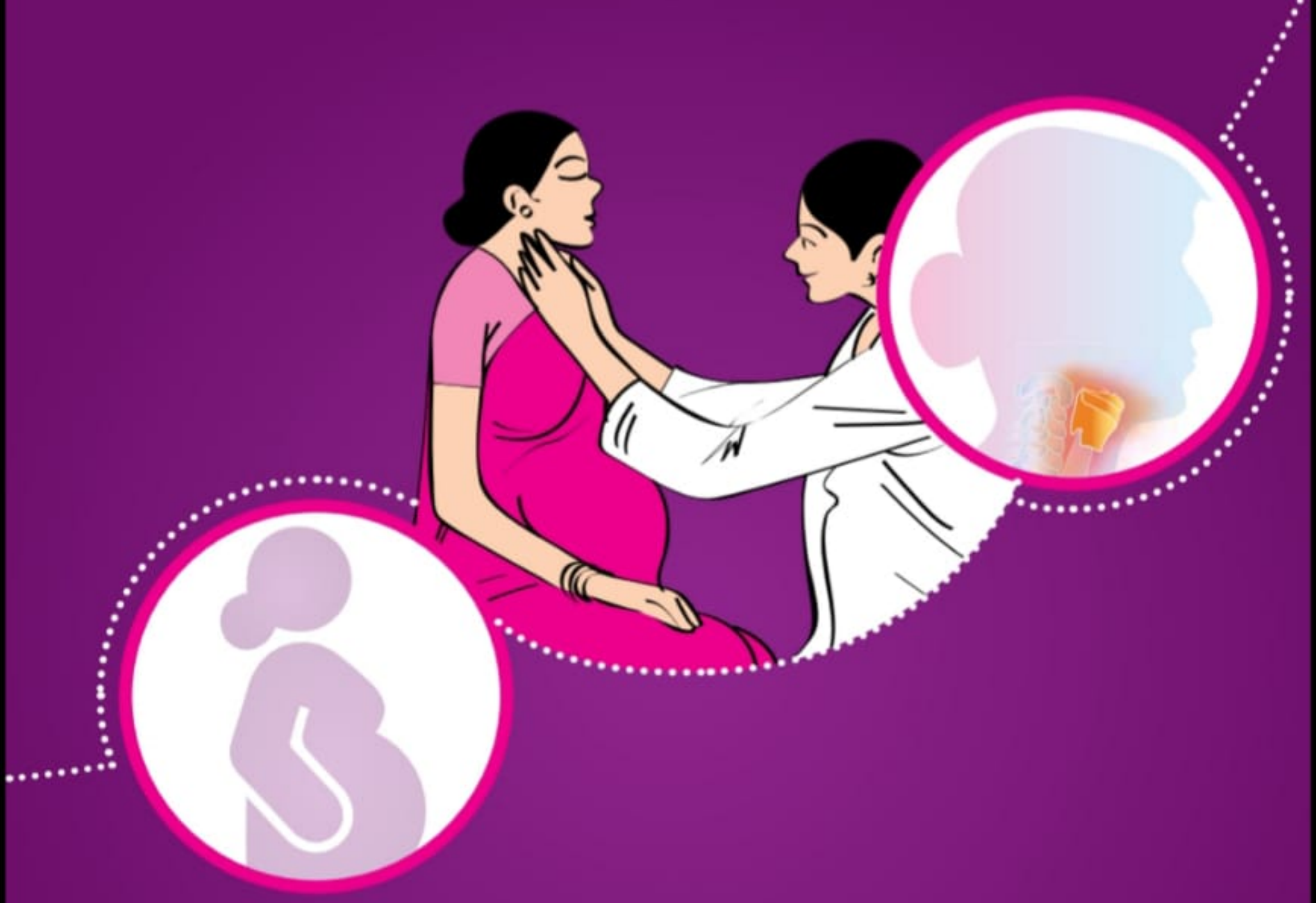
Pre-Pregnancy dose of L-thyroxine to be continued in postpartum

Repeat TSH 6 weeks postpartum
Further treatment as required

सत्यमेव जयते

NATIONAL HEALTH MISSION
राष्ट्रीय स्वास्थ्य मिशन

National Guidelines for
Screening of Hypothyroidism during Pregnancy



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1. Introduction

Primary maternal hypothyroidism is defined as the presence of elevated Thyroid Stimulating Hormone (TSH) levels during pregnancy.

Hypothyroidism can be Overt (OH) or Subclinical (SCH). In overt hypothyroidism, S.TSH levels are elevated and S.T4/Free T4 (FT4) levels are low. S.TSH≥10mIU/l is taken as OH irrespective of FT4 levels. In SCH, the TSH level is elevated (≤ 10mIU/l) with normal Serum T4/FT4.

Positive thyroid antibody titers suggest autoimmune thyroid disease. Euthyroid patients with positive Thyroid Peroxidase Antibody (TPO) titers have high chances of developing hypothyroidism.

The foetus is dependent on maternal trans-placental thyroid hormone supply in the first trimester. This, along with other factors, leads to an increased thyroid hormone demand during pregnancy. To meet the increased demands, the thyroid hormone production increases by 50%.

India is known to be a relatively iodine sufficient belt, however, iodine deficiency is still prevalent in certain pockets like the hilly regions and foothills. Moreover, iron deficiency is common in India, and this also contributes to hypothyroidism. Autoimmune thyroiditis contributes significantly towards hypothyroidism in iodine sufficient regions and may be associated with other autoimmune disorders.

3.2 Diagnostic criteria in pregnancy

TSH levels during pregnancy are lower as compared to TSH levels in a non-pregnant state. Pregnancy-specific and trimester-specific reference levels for TSH are as follows:

Ist trimester - 0.1-2.5mIU/l; IInd trimester - 0.2-3mIU/l; IIIrd trimester - 0.3-3mIU/l.

Hence, in pregnancy, SCH is defined as a serum TSH between 2.5 and 10mIU/L with normal FT4 concentration and OH is defined as serum TSH>2.5-3mIU/l with low FT4 levels. TSH>10mIU/l irrespective of FT4 is OH.

3.3 Methodology for Diagnosis

3.4 Protocol for management of hypothyroidism

→ **Drug of choice for treatment is Levothyroxine.**

Levothyroxine Sodium is available in market as 'tablets' in different strengths. Levothyroxine is to be taken orally, in the morning empty stomach, The patient should be asked not to take anything orally for at least half an hour after intake of the medicine.

The strength required for this programme is 25, 50, 100 µg. It has to be supplied in moisture tight packages and should be stored as room temperature. Exposure to direct sun light or heat should be avoided at all times

Levothyroxine Sodium belongs to category A for use during pregnancy and can be used safely during pregnancy and lactation without any adverse effect on mother or fetus.

Important Note

- → If dose is missed on one day, the patient may take the same as soon as she remembers and should not eat anything for the next half hour
- → If she misses the tablet altogether, she should take double the dose on the next morning
- → A complete bottle of Levothyroxine tablets to be provided to patients (25/50/75/100 mcg)