

Thyroid Disease in Pregnancy

1. Who to screen pre- or in early pregnancy (TSH)

- History of thyroid dysfunction, postpartum thyroiditis and/or thyroid surgery
- Symptoms and/or clinical signs suggestive of thyroid dysfunction or goitre
- Family history of thyroid disorder
- Presence of thyroid or other autoantibodies

- Type 1 diabetes mellitus
- Prior irradiation of head or neck
- Infertility (as part of the infertility work-up)
- History of recurrent miscarriage and/or preterm delivery
- Age ≥ 35

2. Thyroid function test reference ranges in pregnancy

Use laboratory- and trimester- specific ranges. If unavailable, a TSH upper reference limit $\sim 0.5 \text{ mIU/L}$ below the non-pregnant TSH upper reference limit may be used; a TSH lower reference limit of 0.1, 0.2 and 0.3 mIU/L may be used for the first, second and third trimesters respectively.

3. RPAH ANC Thyroid referral criteria

(a) TSH ≥ 4 (on early pregnancy screen)

Please limit referrals to those patients you are uncomfortable in managing. Definitely refer if patient has overt hypothyroidism i.e. an elevated TSH with low fT4 or if TSH $\geq 10 \text{ mIU/L}$

- Always check **TPOAb**
- Can discuss with Endocrinology registrar regarding Thyroxine dose if unsure
- Monitor TSH every **4-6 weeks till 20 weeks** with a final check at **28-32 weeks**
- If Thyroxine is commenced and **TPOAb –ve**, can stop Thyroxine at term. Check TFT 2-3 months' postpartum
- If Thyroxine is commenced and **TPOAb +ve**, halve Thyroxine dose at term and repeat TFT 2-3 months' postpartum. Monitor for postpartum thyroiditis at 3, 6 and 12 months postpartum
- Women on Thyroxine pre-pregnancy will generally require a **20 to 50% dose increase** once pregnancy is confirmed. The dose of Thyroxine can be **reduced to the pre-pregnancy dose at term**

TPOAb = thyroid peroxidase antibodies

Suggested initial Thyroxine dose for hypothyroidism diagnosed in pregnancy:

TSH (mIU/L)	Thyroxine dose (weight based calculation) mcg/kg/day	Thyroxine dose (approximate) mcg
ULN-5	1-1.5	50-75
5-10	1-1.7	75-100
>10	1.7-2.5	100-200

ULN= upper limit of norm

(b) Suppressed TSH (e.g. $<0.01 \text{ mIU/L}$)

Check fT4, fT3 and TRAb

- If fT4 and fT3 are normal with negative TRAb, repeat TFT in 4-6 weeks. May be due to transient gestational hyperthyroidism. Refer if TSH remains suppressed
- Refer if elevated fT4 and/or fT3 and/or TRAb +ve

(c) Past or current history of Graves' disease:

Check fT4, fT3 and TRAb

Refer to determine

- risk of fetal hyperthyroidism
- need for monitoring and/or treatment in pregnancy
- risk of postpartum flare

NB risk of persistent TRAb post RAI and total thyroidectomy

(d) Thyroid nodule

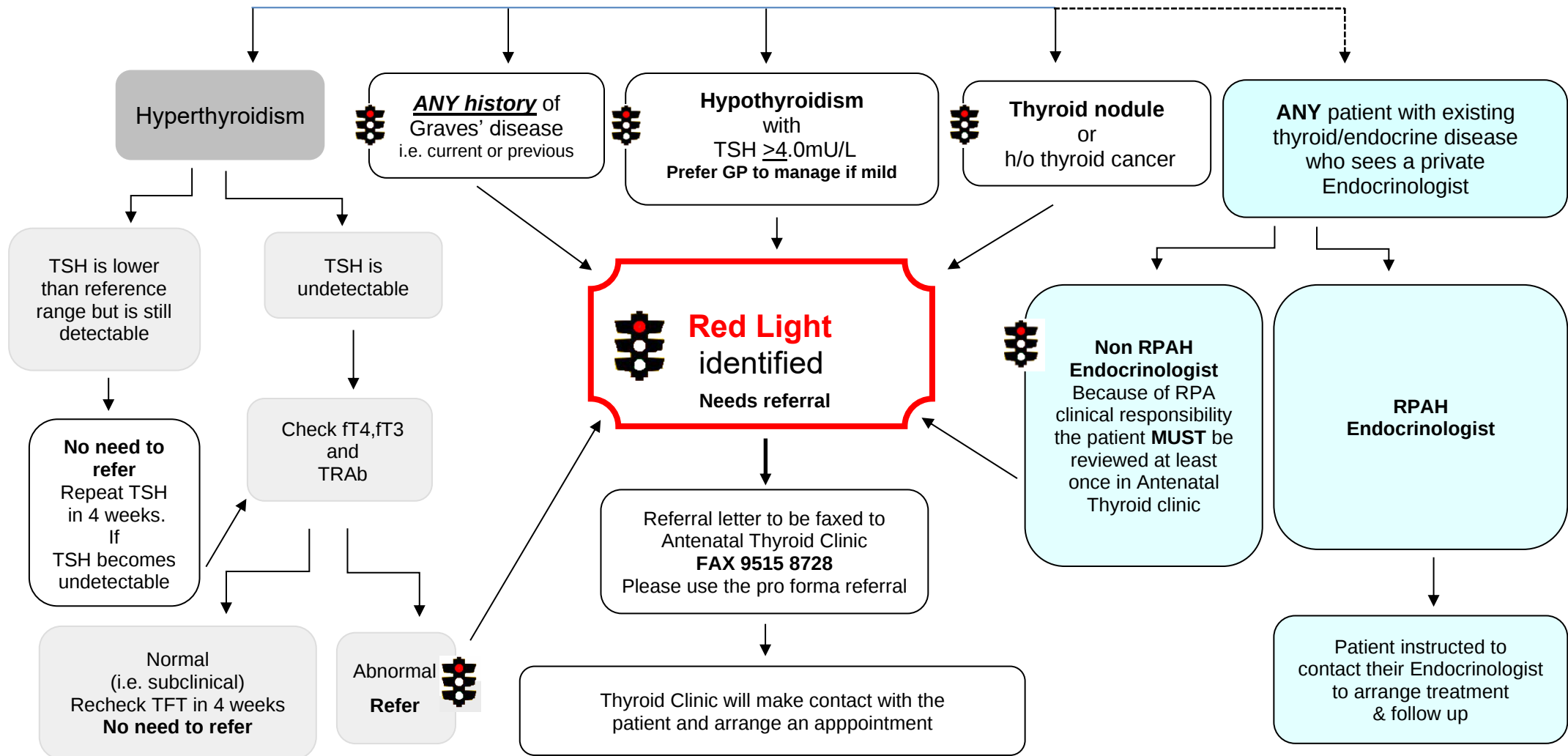
Order TSH and ultrasound

Please ensure that ALL fields are completed on the referral form with CURRENT (ie <3 weeks) pathology prior to faxing to
Endocrine Unit : FAX 9515 8728

Source: Dr Ash Gargya - Endocrinologist RPAH (revised May 2025)
Julie Hetherington – Nurse Practitioner, Endocrinology & Metabolism

- Patients who already take Thyroxine will usually need an increase in dose once pregnancy is confirmed
- This will usually be between a 20 to 50% increase in the dose
- They therefore should have **initial** and then **4-6 weekly** bloods done with a target TSH within the laboratory trimester-specific reference range or, if unavailable, a target TSH of <2.5 in the 1st trimester, <3.0 in the 2nd trimester and <3.5mU/L in the 3rd trimester
- If the target TSH is maintained then the GP can continue to manage patient

Guide to Antenatal Thyroid Clinic referral to RPAH



Any urgent queries or clarifications contact Dr Albert Hsieh (Endocrinologist) or Julie Hetherington (NP Endocrinology) phone 9515-7225 fax 9515 8728 (office hours)
OUT OF HOURS ring RPAH on ph. 9515 6111 and page the Endocrinology Registrar on call

* Please refer to guidelines re: trimester TSH targets

Revised : May 2025