Thyroid disease in pregnancy

There are several common maternal thyroid scenarios that we see in early pregnancy, and hopefully the below will help, along with the **Royal Hospital for Women** **thyroid disease in pregnancy local operating procedure**. If you are unsure or have an urgent patient, you are always welcome to give the Obstetric Medicine Registrar a call through RHW switch.

The below is a brief synopsis of the common scenarios we see.

Just to note, where I comment in the below that a patient should be referred for physician review, you can read that as referral to the public Obstetric Medicine service at RHW or a private endocrinologist/obstetric medicine physician if that is your and the patient's preference.

1) **A woman with known pre-existing hypothyroidism on thyroxine before pregnancy:**
    a. Should be on levothyroxine treatment (T4) rather than thyroid extract or T3 supplementation as the T4 crosses better to baby – if she is on those other preparations, she should be referred for physician review ASAP in pregnancy or ideally prior to pregnancy to discuss.
    b. Levothyroxine dose needs to increase by ~ 30% as soon as pregnancy is diagnosed (*quick tip – if she is on the same dose every day eg 100mcg, double the weekend dose*) and repeat the TFTs in ~ 4 weeks (*sooner if very abnormal initially*)
    c. If the hypothyroidism is due to previous thyroid cancer, or Grave's disease with previous surgery or radioactive iodine please check TRAB antibodies and refer her for physician review ASAP
    d. Otherwise, if she is well, the thyroid levels are well controlled, increase the levothyroxine dose, and aim the TSH < 2.5 IU/L and not suppressed, and repeat TFTs every ~ 4 weeks in pregnancy to monitor. If you are having difficulty with levels refer her for physician review.
    e. At the end of the pregnancy reduce back to pre-pregnancy levothyroxine dose and recheck TFTs at ~ 6 weeks postpartum.
2) **A woman with current Graves' disease**
    a. Should be recommending avoidance of pregnancy with active Graves' disease and refer for preconception review if planning pregnancy
    b. If conceives with active Graves' disease, please check TSH, Ft4, Ft3 and TRAB antibodies and refer for physician ASAP for review in pregnancy. These are high risk pregnancies.
    c. Postpartum, expect a flare and watch TFTs at least every three months.
3) **New hyperthyroidism in pregnancy**
    a. This might be subclinical or overt hyperthyroidism
    b. It is often from an effect of BHCG on the thyroid, especially with twins and some other situations such as hyperemesis, BUT it needs assessment in case it is actual thyroid disease.
    c. Repeat the TSH, Ft4, Ft3 and check TRAB antibodies, consider a thyroid ultrasound (but do not perform a radioactive thyroid uptake scan), and refer for physician review. Usually, time will tell if this is just gestational thyrotoxicosis or an actual thyroid issue.
4) **Screening the well woman and Subclinical hypothyroidism in pregnancy**
    a. **The general recommendation is not to universally screen,** but screen women with risk factors – a personal history of abnormal thyroid or thyroid antibodies, age > 30

years, BMI > 40, personal or family history of autoimmune disease, presence of goitre, from an area of iodine insufficiency, medications that can alter thyroid eg lithium, amiodarone, past history of neck irradiation, past history of infertility or pregnancy loss.

b. **If the TSH is elevated,** repeat the TFTs, fT4 and fT3, TPOab and TGab, and if TSH > 4.0 start thyroxine (dose depends on TSH eg if TSH > 10 then commence 100mcg/day, if 4.0-9.9 start 50mcg per day). Refer on for physician review.
c. **We do not currently treat elevated TSH < 4.0 regardless of antibodies**