

## Management

### Primary Care management includes

- Recognition of the signs and symptoms of overt hypothyroidism. Appropriate history and examination.
- Blood test for Thyroid Stimulating Hormone (TSH), Thyroxine (T4) and where possible Free Triiodothyroid (T3) levels.
- Overt hypothyroidism is defined as a raised thyroid-stimulating hormone (TSH) level with a reduced free thyroxine (T4) level and characteristic clinical features.
- The management is usually straightforward with levothyroxine (thyroxine) replacement therapy.
- The aim is to return the TSH level to the normal range.
- Coexistent coronary heart disease, especially in the elderly, requires careful initiation of levothyroxine, and gradual titration of dose with vigilant monitoring, as there is a risk of worsening angina, myocardial infarction, and sudden death [Vanderpump et al, 1996].
- Awareness of various interactions of thyroxine with other medications including warfarin, that may need additional monitoring.

### Specialist management includes

- Closer monitoring of thyroid and other hormone levels.
- Use of alternative medications to thyroxine.

## When to refer

### Emergency [discuss with on-call specialist]

- Severe symptoms of hypothyroidism requiring immediate medical attention can occur, although hypothyroid coma (myxoedema coma) is now very rare.

### Urgent out-patient referral [liaise with specialist and copy to CAS]

- **Subclinical hypothyroidism** - defined as a raised thyroid-stimulating hormone (TSH) level with a normal free T4 level and no specific clinical features. (There is no consensus on the management of subclinical hypothyroidism. Some specialists recommend initiating thyroxine treatment, others recommend annual review. If initiating treatment, this should only be undertaken if diagnosis is confirmed on repeat testing 3 months later. PRODIGY recommends that advice is sought from local endocrinologists as shared care guidelines may exist.)
- People **less than 16 years**.
- In **pregnancy and post partum**, (when untreated hypothyroidism is associated with an increased risk of pre-eclampsia, anaemia, premature labour, low birth weight, fetal loss, stillbirth, and postpartum haemorrhage.)
- Evidence of **pituitary disease** (low TSH and low T4).

### Refer to CAS

- Uncertainty over diagnosis of symptoms of hypothyroidism.
- Uncertainty over treatment initiation or titration.

### Refer to RARC

- if the patient does not meet the referral criteria above consider referral to CAS requesting a RARC appointment.