Note:
This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient’s medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

• The use of interpreter services where necessary,
• Advising consumers of their choice and ensuring informed consent is obtained,
• Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
• Documenting all care in accordance with mandatory and local requirements

Synonyms
T4, thyroxine

Dose and Indications

**Congenital hypothyroidism**

**Oral**

8-15microgram/kg once a day

Due to practicality, doses less than 25 microgram per day are generally not recommended (round dose to nearest 25 microgram). In some situations, doses may be given as alternate daily dosing (eg. 25 microgram alternate daily instead of 12.5microgram once daily).

Consultation with Paediatric Metabolic Consultant or Endocrinologist is recommended.

**Preparation and Administration**

**Oral**

Doses should be rounded to half a tablet (25 microgram increments).

Place the required dose in the barrel of a syringe and disperse in 3 - 5 mL of sterile water. Use solution immediately.

Alternatively, the portion of the tablet required for the dose may be crushed on a spoon and suspended in a small amount of water and administered orally.
Levothyroxine Sodium
50 microgram tablet

Adverse Effects

Symptoms of hyperthyroidism, eg tachycardia, arrhythmia, tremors or jitters, insomnia, flushing, sweating, diarrhoea, excessive weight loss

Monitoring

> Aim to closely monitor thyroid function using free T4 and TSH at 2 weeks after starting the medication then 2-3 monthly. Patients with congenital hypothyroidism will require outpatient follow up with Metabolic Clinic.
> It is recommended to re-check thyroid function 2-3 weeks after dose changes.
> Adjust dose to maintain serum thyroxine in the upper half of the normal range and serum TSH level in the normal range.

Practice Points

> Avoid milk/food within 30 minutes of dose.
> Thyroxine has a long half-life and so doses may be given every alternate day if needed. This may work out easier to administer as the dose can be rounded to the nearest tablet strength.
> Oral dosing produces effect within 3 to 5 days of therapy (the clinical effect will continue for 1 week following discontinuation of therapy).
> Dose should be repeated if baby vomits or regurgitates within 30 minutes.
Document Ownership & History

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