Synonyms
T4, levothyroxine

Dose and Indications

Congenital hypothyroidism

Oral

Up to 10microgram/kg once a day, rounded to the nearest 12.5 microgram.

Preparation and Administration

Oral

Thyroxine tablets are very soluble in water.

Add one 50microgram tablet to the barrel of a syringe and draw up sterile water to a volume of 1mL. The resulting solution contains 50microgram/mL thyroxine.

<table>
<thead>
<tr>
<th>Dose</th>
<th>12.5microgram</th>
<th>25microgram</th>
<th>50microgram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>0.25mL</td>
<td>0.5mL</td>
<td>1mL</td>
</tr>
</tbody>
</table>

Use solution immediately and discard any remaining solution.

Adverse Effects

Symptoms of hyperthyroidism, eg tachycardia, arrhythmia, tremors or jitters, insomnia, flushing, sweating, diarrhoea and excessive weight loss.
Thyroxine
50microgram tablet

Monitoring

> Aim to closely monitor thyroid function using free T4 and TSH at 2 weeks after starting the medication then 2-3 monthly during the first 4 years.
> 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
> For appropriate patients, dose can be rounded off to the nearest 25mg (half a tablet) instead of 12.5mg, and given on alternate days
> 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 15 minutes.
Document Ownership & History

Developed by: SA Maternal, Neonatal & Gynaecology Community of Practice
Contact: Health.NeoMed@sa.gov.au
Endorsed by: SA Health Safety and Quality Strategic Governance Committee
Next review due: 13/8/2018
PDS reference: CG291
Policy history:

Is this a new policy (V1)? N
Does this policy amend or update and existing policy? Y
If so, which version? V1
Does this policy replace another policy with a different title? N
If so, which policy (title)?

<table>
<thead>
<tr>
<th>Approval Date</th>
<th>Version</th>
<th>Who approved New/Revised Version</th>
<th>Reason for Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/03/2018</td>
<td>V1.1</td>
<td>SA Health Safety and Quality Strategic Governance Committee</td>
<td>Review date extended to 5 years following risk assessment. New Template</td>
</tr>
<tr>
<td>13/8/13</td>
<td>V1</td>
<td>SA Health Safety and Quality Strategic Governance Committee</td>
<td>Original SA Health Safety and Quality Strategic Governance Committee approved version.</td>
</tr>
</tbody>
</table>