Hypothyroidism (underactive Thyroid disease) guideline (GL945)

Approval

<table>
<thead>
<tr>
<th>Approval Group</th>
<th>Job Title, Chair of Committee</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity &amp; Children's Services</td>
<td>Chair, Maternity Clinical Governance Committee</td>
<td>1\textsuperscript{st} June 2018</td>
</tr>
<tr>
<td>Clinical Governance Committee</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Change History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author, job title</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>Oct 2013</td>
<td>Pat Street (Consultant Obstetrician), Diptendra Ghosh (Associate Specialist Diabetes and Endocrinology)</td>
<td>Review and update</td>
</tr>
<tr>
<td>5.1</td>
<td>March 2016</td>
<td>Diptendra Ghosh (Associate Specialist Diabetes and Endocrinology), Sunetra Sengupta (Consultant Obstetrician)</td>
<td>Reviewed, no changes</td>
</tr>
<tr>
<td>6.0</td>
<td>May 2018</td>
<td>Diptendra Ghosh (Associate Specialist Diabetes and Endocrinology), Sunetra Sengupta (Consultant Obstetrician)</td>
<td>Pg 2 thyroid function test criteria changed to 36 weeks from delivery</td>
</tr>
</tbody>
</table>
Overview: Women with untreated hypothyroidism rarely become pregnant. Hypothyroid women on treatment may need their dose adjusting. A good outcome is expected.

1.0 Diagnosis
• elevated serum TSH
  And
• low or normal serum free T4
• anti-thyroid peroxidase antibodies are markers for auto-immune thyroid disease
  Sub-clinical disease can exist with mildly elevated TSH and normal thyroxine levels.

2.0 Management
• There is an increased risk of miscarriage in women with untreated or suboptimally treated hypothyroidism. If hypothyroidism is well controlled pregnancy complications are unlikely. However, if hypothyroidism is suboptimally treated, there is an increased risk of preterm labour, pregnancy induced hypertension, anaemia and postpartum haemorrhage.
• Hypothyroidism in early pregnancy increases the risk of impaired fetal intellectual development
• All patients should be referred to the joint endocrine/antenatal clinic for specialist care in pregnancy
• If already on Levothyroxine, increase dose by 30 % when pregnancy confirmed.
• Organise thyroid function test (TFT) at 6-8 weeks gestation, then every 6-8 weeks until 36 weeks. Repeat TFT 4 weeks after adjusting the dose of levothyroxine
• Levothyroxine dose depends on TFT's. Aim for TSH below 2.5. An increase in levothyroxine dose is likely by an average of 25-50 mcg as pregnancy progresses. After delivery, thyroid requirements may decrease.
• Repeat TFT’s 4-6 weeks after delivery and adjust levothyroxine dose accordingly
• Thyroid autoantibody positive euthyroid pregnancy: consult endocrinologist
• Isolated maternal hypothyroxinaemia has no adverse perinatal outcome

3.0 References
1. 2017 Guidelines of the American Thyroid Association for the Diagnosis and Management of Thyroid Disease during Pregnancy and the Postpartum