Oxford University Hospitals
NHS Foundation Trust

# Hypothyroidism and Pregnancy

## Information for parents-to-be

This information leaflet is for women who are pregnant or are thinking of becoming pregnant and have been given a diagnosis of hypothyroidism.

## What is your thyroid gland?

Your thyroid gland is in the middle of your neck and is important in producing thyroid hormones (called T3/triiodothyronine and T4/thyroxine). Your thyroid gland produces these hormones when triggered by a different hormone called thyroid stimulating hormone (TSH) that is produced by a small gland in your brain called the pituitary gland.

T3 and T4 are important in regulating your metabolism, mood, digestion and brain development. When T3 and T4 levels are low, the pituitary gland detects this and responds by producing more TSH. The pituitary gland produces less TSH when T3 and T4 levels are high enough in the body. The correct functioning of these hormones relies on you having a good amount of iodine in your body, which you typically get from the food you eat.

## What is hypothyroidism?

This is a condition where your thyroid does not produce enough of the thyroid hormones. You can feel unwell if this happens, with symptoms such as weight gain, constipation and hair loss. For the purposes of this leaflet it will be described from now on as 'overt' hypothyroidism. This is diagnosed with blood tests, which measure TSH, T3 and T4 levels. Overt hypothyroidism is diagnosed when the TSH is higher than normal and the T3 and T4 are lower than normal.

# If I am pregnant, does overt hypothyroidism affect my baby?

The baby relies on the mother's thyroid hormone in the first 12 weeks of pregnancy. If the mother's thyroid hormones are low, this can result in problems for the baby including with the development of their brain. It is really important if a woman has a diagnosis of overt hypothyroidism that medication is continued in pregnancy and blood tests for thyroid function are checked regularly (for example every three months or more often if the dose of medication is changed).

# What is subclinical hypothyroidism?

This is a condition where the thyroid produces a normal amount of T3 and T4, but is having to work harder to achieve production and needs more TSH to stimulate it. This diagnosis is made on a blood test when the TSH is higher than it should be (between 4.2 and 10 milliUnits/L) but the T3 and T4 are normal. As the levels of T3 and T4 are normal, no symptoms occur which is why it is called 'subclinical'. This occurs in 2 to 3% of all pregnant women.

There is a chance that, over time subclinical hypothyroidism will worsen and develop into overt hypothyroidism.

# If I am pregnant, does subclinical hypothyroidism affect my baby?

There is no evidence that subclinical hypothyroidism has long term consequences on the development of the baby. However miscarriages may be a little more common in women with subclinical hypothyroidism and antibodies against the thyroid (thyroid peroxidase antibodies).

# What is the treatment for this?

**Our current treatment recommendations are:**

| **Overt hypothyroidism** |
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| Thyroid hormone replacement with levothyroxine |

| **Subclinical hypothyroidism (TSH 4.2 to 10.0 milliUnits/L)** | |
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| Antibody negative | No treatment, regular checks of thyroid function |
| Antibody positive | levothyroxine treatment may be offered |

# If on treatment

The target level for TSH when on treatment is 2.5 milliUnits/L or lower.

# If not on treatment

If your TSH is between 2.5 and 4.2 milliUnits/L you may previously have been advised to take levothyroxine treatment. Recent research suggests that this is not required as there is a chance of over-treatment.

# What monitoring is needed?

In all women with hypothyroidism or the presence of thyroid peroxidase antibodies, we suggest that thyroid function should be checked every three months during pregnancy and at the 6 week GP appointment after you have given birth. It is also advisable to have your thyroid function checked 4 to 6 weeks after any change in dose of medication. This can be done at your GP surgery.

# Where should I go if I have questions?

Please contact your GP or midwife if you have questions about your hypothyroidism or to arrange any blood tests. If complications arise then you may also be reviewed by the Silver Star Team, but this is not always required.

**Please contact your GP or midwife if you have any questions.**

## Further information

Please speak to the department where you are being seen if you would like an interpreter. You will find their contact details on your appointment letter. Please also ask them if you would like this information leaflet in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronically
- in another language.

We have tried to make this information meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They will be happy to help.

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