Undiagnosed thyroid dysfunction can make it difficult to conceive. It can also cause problems during pregnancy itself. Once the over- or under-active thyroid is under control, however, there is no reason why you should not have a successful pregnancy and a healthy baby.

**Pregnancy and hyperthyroidism**

**Before pregnancy**

Thyroid surgery is rarely required. If needed it should ideally be performed during the middle three months of pregnancy. Radioactive iodine, another treatment for hyperthyroidism, should never be used during pregnancy.

There are several complications to be aware of if you have (had) hyperthyroidism. There is, unfortunately, an increased risk of miscarriage in the early stages of pregnancy if your hyperthyroidism is not under control. If you are taking antithyroid drugs there is a very slight increased risk of the baby developing structural abnormalities so some patients choose to have definitive treatment for Graves’ disease with radioactive iodine or surgery before considering a pregnancy. Also, if the dose of antithyroid drugs is too high, the baby’s thyroid may become under-active and the baby may develop a goitre. When trying to conceive or during pregnancy, do not stop taking antithyroid drugs before speaking to your doctor. There is greater risk to the pregnancy from an untreated over-active thyroid gland than from taking antithyroid medication.

Untreated hyperthyroidism can also lead to complications of high blood pressure in pregnancy, poor growth of the baby and premature delivery. You will require regular thyroid function tests in pregnancy to ensure you are on an appropriate dose. If you have been treated for Graves’ disease with radioactive iodine or surgery in the past, or need antithyroid drugs during pregnancy, you may have Graves’ antibodies (also known as thyroid-stimulating immunoglobulins or TSI), which can cross the placenta. On rare occasions these can cause temporary hyperthyroidism in the baby during pregnancy and after birth, but this is treatable. A simple blood test to measure the thyroid-stimulating hormone receptor antibodies in the mother can help predict whether the baby will be affected in this way. If the levels of antibodies are high it is likely that you and your baby will be monitored more closely.

**After the baby is born**

Women who have previously had Graves’ disease (but not had thyroid surgery or radioiodine) may relapse at any stage, but the risk rises after giving birth and remains high for one year. You should arrange to have your blood tested around three months after delivery and at intervals thereafter. If you stopped taking antithyroid drugs during your pregnancy you should see your doctor if you notice any symptoms of hyperthyroidism.

Only small amounts of antithyroid drugs cross into breast milk. If you are on antithyroid drugs, you can breast-feed provided the dose is low, but check first with your doctor. Antithyroid drugs are best taken in smaller doses over two or three times a day following a feed. If you require higher doses of antithyroid drugs to control hyperthyroidism then your baby can have a blood test to check whether its thyroid is being affected.

Mothers with Graves’ disease who are not taking antithyroid drugs can safely breast-feed.

**Pregnancy and hypothyroidism**

**Before pregnancy**

If you have an untreated (or undertreated) underactive thyroid gland (hypothyroidism) you are likely to find it more difficult to conceive. You may have longer or heavier periods, which can cause
anaemia, or your periods may stop completely. Once you are taking medication (levothyroxine tablets) and your thyroid hormone levels are back to normal your chances of becoming pregnant should improve dramatically.

If you are planning a pregnancy you should let your doctor know and ideally have a blood test before you conceive. Experts in the field recommend that if you are on levothyroxine the TSH level should ideally be kept in the lower half of the reference range before pregnancy as this has been associated with a lower risk of miscarriage.

**During pregnancy**

It is likely that you will require higher doses of levothyroxine during pregnancy, especially during the first 20 weeks, to provide sufficient supply of thyroid hormones to the baby. If you are taking levothyroxine, you should increase your dose by approximately 25mcg daily as soon as you have a positive pregnancy test. This can also be achieved by doubling the dose of levothyroxine on two days of the week. You should then arrange to have a thyroid function test so that more targeted adjustments can be made if required.

Even if your thyroid function test result is not ideal at the start of pregnancy, your risk of a pregnancy complication is only slightly higher than normal and you would still have a good chance of a successful pregnancy outcome. However, your levothyroxine treatment should be adjusted to normalise your thyroid function as soon as possible.

You should have regular blood tests throughout your pregnancy so that your dose can be adjusted if necessary.

If you are prescribed supplements containing iron, calcium or Gaviscon you should take these several hours before or after the levothyroxine since these can alter the absorption of levothyroxine.

**After the baby is born**

After the birth you will probably need to return to the dose of levothyroxine you were taking before the pregnancy. You should have a blood test to check your thyroid hormone levels a few weeks after the birth. It is safe to breast-feed while taking levothyroxine.

In the UK all babies have a heel-prick blood test to screen for hypothyroidism shortly after birth and treatment can be started very quickly if your baby needs levothyroxine. Hypothyroidism is rare in newborn babies in the UK - only about one baby in every 2,000-3,000 is born with hypothyroidism.

**Post-partum thyroiditis**

Postpartum thyroiditis, a temporary inflammatory thyroid disorder, occurs following 5-10% of pregnancies and is typically found in women with thyroid auto-antibodies. It usually shows up in the mother within six to twelve months after the birth. Your thyroid may be a little swollen, but it is almost never painful. It usually starts with symptoms of an over-active thyroid (hyperthyroidism), which can resolve by itself but may develop into symptoms of an under-active thyroid (hypothyroidism). If you develop hypothyroidism you may feel tired, lethargic, depressed and cold, and your skin may be dry. If it persists you will need to take levothyroxine tablets. Most women are able to stop taking these tablets after six to twelve months, but around a third of women develop permanent hypothyroidism and need levothyroxine treatment in the long term.

If you have had postpartum thyroiditis, even though you have made a full recovery initially, it is recommended that you have your thyroid function checked before you try to conceive again and at the start of your next pregnancy to ensure that you have not developed hypothyroidism. There is an up to 50% risk that you develop a recurrence of postpartum thyroiditis in subsequent pregnancies. Women with type 1 diabetes mellitus are at higher risk of this condition.
Some important points…..

- Tell your doctor if you are planning to become pregnant
- An over- or under-active thyroid can prevent you from conceiving. Pregnancy can happen very quickly after your thyroid function returns to normal
- Always tell your midwife or obstetrician if you have a thyroid disorder or have been treated for one in the past
- If you are, or have been, treated for Graves’ disease, there is a very small chance that your baby will develop temporary hypothyroidism, but this can be monitored and treated during pregnancy and after the birth
- If you are being treated for hypothyroidism it is recommended that you double the dose of levothyroxine on two days of the week once you know you are pregnant (or take an extra 25mcg per day)
- If you are taking antithyroid medication for hyperthyroidism, do not alter your dose without first speaking to your doctor
- It is safe to breast-feed if you are taking levothyroxine tablets. If you are taking antithyroid tablets it is also generally safe to breast-feed, but speak to your doctor first
- Postpartum thyroiditis is usually a temporary disorder that can clear up without treatment after a few months, but sometimes you will need a course of levothyroxine tablets
- Postpartum thyroiditis can lead to hypothyroidism in future pregnancies and return after subsequent pregnancies so it is important to have a thyroid function test before you conceive and after each birth
- Thyroid hormone reference ranges for pregnant women are different from those in the general non-pregnant population. This should be taken into account in interpreting thyroid function in pregnancy.

Thyroid problems often run in families and if family members are unwell they should be encouraged to discuss with their own GP whether thyroid testing is warranted.

If you have questions or concerns about your thyroid disorder, you should talk to your doctor or specialist as they will be best placed to advise you. You may also contact the British Thyroid Foundation for further information and support, or if you have any comments about the information contained in this leaflet.

The British Thyroid Foundation
www.btf-thyroid.org

The British Thyroid Foundation is a registered charity: England and Wales No 1006391, Scotland SC046037

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