

The Thyroid and Pregnancy

Even before conception, thyroid conditions that have lingered untreated can hinder a woman's ability to become pregnant or can lead to miscarriage. Fortunately, most thyroid problems that affect pregnancy are easily treated. The difficulty lies in recognizing a thyroid problem during a time when some of the chief complaints — fatigue, constipation and heat intolerance — can be either the normal side effects of pregnancy or signals that something is wrong with the thyroid.

Although detecting a thyroid problem is important, it is equally necessary for those already diagnosed with a condition to have the thyroid checked if they are planning to become pregnant or are pregnant. Thyroid hormone is necessary for normal brain development. In early pregnancy, babies get thyroid hormone from their mothers. Later on, as the baby's thyroid develops, it makes its own thyroid hormone. An adequate amount of iodine is needed to produce fetal and maternal thyroid hormone. The best way to ensure adequate amounts of iodine reach the unborn child is for the mother to take a prenatal vitamin with a sufficient amount of iodine. Not all prenatal vitamins contain iodine, so be sure to check labels properly.



Thyroid Disorders and Miscarriage

A woman with untreated hypothyroidism is at the greatest risk for a miscarriage during her first trimester. Unless the case is mild, women with untreated hyperthyroidism are also at risk for miscarriage.

Who should be tested?

Despite the impact thyroid diseases can have on a mother and baby, whether to test every pregnant woman remains controversial. As it stands, doctors recommend that all women at high risk for thyroid disease or women who are experiencing symptoms should have a TSH and an estimate of free thyroxine blood tests and other thyroid blood tests, if warranted. A woman is at a high risk if she has a history of thyroid disease or thyroid autoimmunity, a family history of thyroid disease, type 1 diabetes mellitus or any other autoimmune condition.

Anyone with these risk factors should be sure to tell their obstetrician or family physician. Ideally, women should be tested prior to becoming pregnant at prenatal counseling and as soon as they know they are pregnant.

Hypothyroidism & pregnancy

When a woman is pregnant, her body needs enough thyroid hormone to support a developing



fetus and her own expanded metabolic needs. Healthy thyroid glands naturally meet increased thyroid hormone requirements. If someone has Hashimoto's thyroiditis or an already overtaxed thyroid gland, thyroid hormone levels may decline further. So, women with an undetected mild thyroid problem may suddenly find themselves with pronounced symptoms of hypothyroidism after becoming pregnant.

Most women who develop hypothyroidism during pregnancy have mild disease and may experience only mild symptoms or sometimes no symptoms. However, having a mild, undiagnosed condition before becoming pregnant may worsen a woman's condition. A range of signs and symptoms may be experienced, but it is important to be aware that these can be easily written off as normal features of pregnancy. Untreated hypothyroidism, even a mild version, may contribute to pregnancy complications. Treatment with sufficient amounts of thyroid hormone replacement significantly reduces the risk for developing pregnancy complications associated with hypothyroidism, such as premature birth, preeclampsia, miscarriage, postpartum hemorrhage, anemia and abruptio placentae.

For a woman being treated for hypothyroidism, it's imperative to have her thyroid checked as soon as



the pregnancy is detected so that medication levels may be adjusted. TSH levels may be checked one to two weeks after the initial dose adjustment to be sure it's normalizing. Once the TSH levels drop, less frequent check-ups are necessary during the pregnancy. Although thyroid hormone requirements are likely to increase throughout the pregnancy, they tend to eventually stabilize by the middle of pregnancy. The goal is to keep TSH levels within normal ranges, which are somewhat different than proper levels in a non-pregnant woman. Pre-pregnancy doses are usually resumed after giving birth.

There is no difference between treating hypothyroidism when a woman is pregnant than when she isn't. Levothyroxine sodium pills are completely safe for use during pregnancy. They will be prescribed in dosages that are aimed at replacing the thyroid hormone the thyroid isn't making so that the TSH level is kept within normal ranges. Once it is consistently in the normal range, the doctor will check TSH levels every six weeks or so. The physician may also counsel patients to take their thyroid hormone pills at least one-half hour to one hour before or at least four hours after eating or taking iron-containing prenatal vitamins and calcium supplements, which can interfere with the absorption of thyroid hormone.



Hyperthyroidism & pregnancy

Diagnosing hyperthyroidism based on symptoms can be tricky because pregnancy and hyperthyroidism share a host of features. Still, one should be aware of the symptoms and bring them to the attention of a doctor if they are experiencing them. For instance, feeling a heart flutter or suddenly becoming short of breath, both symptoms of hyperthyroidism, can be normal in pregnancy, but a doctor still may want to investigate these symptoms. An individual with any risk factors for thyroid disease should make certain they are tested.

Very mild hyperthyroidism usually does not require treatment, only routine monitoring with blood tests to make sure the disease does not progress. More serious conditions require treatment. However, treatment options are limited for pregnant women. Radioactive iodine, which is typically used to treat Graves' disease, cannot be used during pregnancy because it easily crosses the placenta, potentially damaging the baby's thyroid gland and causing hypothyroidism in the baby.

Due to its potential risks, the goal of treatment is to use the minimal amount of antithyroid drugs possible to maintain a patient's T4 and T3 levels at or just above the upper level of normal, while



keeping TSH levels low. When hormones reach the desired levels, drug doses can be reduced. This approach controls hyperthyroidism while minimizing the changes of a baby developing hypothyroidism.

Hyperthyroidism, if untreated, can lead to stillbirth, premature birth, or low birth weight for the baby. Sometimes it leads to fetal tachycardia, which is an abnormally fast pulse in the fetus. Women with Graves' disease have antibodies that stimulate their thyroid gland. These antibodies can cross the placenta and stimulate a baby's thyroid gland. If antibody levels are high enough, the baby could develop fetal hyperthyroidism, or neonatal hyperthyroidism.

A woman with hyperthyroidism while pregnant is at an increased risk for experiencing any of the signs and symptoms of hyperthyroidism. And unless the condition is mild, if it is not treated promptly a woman could miscarry during the first trimester; develop congestive heart failure, preeclampsia, or anemia; and, rarely, develop a severe form of hyperthyroidism called thyroid storm, which can be life threatening.

Graves' disease tends to strike women during their reproductive years, so it should come as no surprise that it occasionally occurs in pregnant



women. Pregnancy may worsen a preexisting case of Graves' disease. Graves' disease can also emerge for the first time, typically during the first trimester of pregnancy. The disease is usually at its worst during the first trimester. It tends to then improve in the second and third trimesters and flare up again after delivery.

