Graves’ Disease in Pregnancy Planning

by Giuseppe Barbesino, M.D.

Both hypothyroidism and hyperthyroidism can affect fertility. Achieving a euthyroid state may in itself restore normal fertility. Doctors typically recommend that all women with Graves’ disease become euthyroid before pregnancy.

Thyroid disorders can impair the health of both you and your baby during pregnancy. Therefore, if you already know that you have Graves’ Disease, you should consult with your doctor before trying to conceive.

Some people develop hypothyroidism as a consequence of Graves’ disease treatment with radioactive iodine. If you have hypothyroidism and are taking thyroid hormone, your levels of thyroid hormone and TSH (the pituitary hormone that regulates your thyroid’s function) should be tested before you proceed with a pregnancy. To avoid any damage to the baby’s neurological development early in pregnancy, your daily dose of thyroid hormone should be adjusted to achieve completely normal thyroid function and a TSH level between 0.5 and 2.5 before you conceive.

If you have hyperthyroidism and want to conceive, you and your doctor can discuss several options. Many physicians advise women to have a definitive cure of hyperthyroidism before becoming pregnant. This can be accomplished with radioactive iodine or surgery. Both of these methods typically result in hypothyroidism, which can then be treated with thyroid hormone. With radioactive iodine, enough thyroid cells are damaged or destroyed so that the thyroid stops producing excessive thyroid hormone. Radioactive iodine is given by mouth in a single visit, but it may take up to six months to complete its effects. Therefore, it is recommended that women wait six months after treatment before they become pregnant.

Surgery to remove all or most of the thyroid gland is the quickest way to definitively correct hyperthyroidism. Women can plan on a pregnancy two to three months after surgery. However, surgery is also a more invasive treatment, as it requires general anesthesia and carries a small but concrete risk of complications.

Alternatively, hyperthyroidism can be managed effectively with medications (anti-thyroid drugs). Two anti-thyroid drugs are available in the United States: methimazole (Tapazole) and propylthiouracil (PTU). PTU is nowadays very rarely used in Graves’ disease as it has been linked to several cases of fatal liver disease. If you are taking Tapazole, your physician will probably have you switch to PTU if you are taking Tapazole. This is because Tapazole has been associated with extremely rare but serious malformations in the fetus when given during the first trimester. Your dosage will be lowered before pregnancy to the minimum amount capable of maintaining your thyroid function in the upper-normal range.

Because pregnancy reduces the autoimmune reaction, many women can actually stop their anti-thyroid drugs in the second half of their pregnancy. If not, Tapazole is re-started in the second trimester, when the fetal development is well advanced and the risk of malformations is nil.

Whichever option you choose, it is important that your hyperthyroidism be fully corrected before you become pregnant. That’s because pregnancy with untreated hyperthyroidism is associated with such problems as a higher risk for miscarriage, premature birth, and malformations. These risks clearly outweigh any of the risks posed by the available treatments.

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