

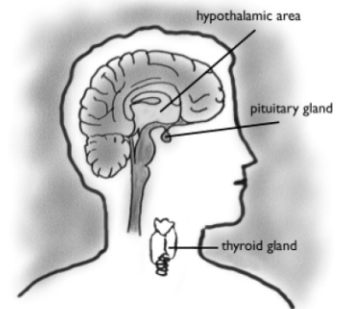
NEONATAL GRAVES DISEASE

What is Graves disease?

Graves disease is an autoimmune disease that affects the thyroid gland. The body's immune system usually protects the body from things that can harm it, like germs, by making substances called antibodies that destroy what is harmful. In the case of Graves disease, the body makes antibodies that act like TSH (the hormone that acts on the thyroid gland to produce the thyroid hormones). This results in hyperthyroidism (too much thyroid hormone). Thyroid hormone is important for normal growth and development, but too much hormone makes the body speed up all its activities.

What causes neonatal Graves disease?

Neonatal Graves disease happens when the mother of a newborn has or has had Graves disease. The mother's antibodies can cross the placenta causing the baby to make too much thyroid hormone.



What are the symptoms of hyperthyroidism in a baby?

Signs can occur a bit differently in each baby. They can include:

- fast heartbeat, high blood pressure
- low birth weight/poor weight gain
- warm, moist skin
- enlarged thyroid gland (goitre)
- jitteriness, irritability, restlessness
- trouble sleeping
- bowels move too often

How is neonatal Graves disease diagnosed and treated?

Only a small number of babies whose mother have or have had Graves disease will be affected. It is important for mothers with a history of Graves disease—even if it was treated in the past and is currently in remission—to let their healthcare providers know, so the baby can be checked carefully after birth. If a baby's thyroid hormone levels are too high, there are oral medications that can be given to correct the levels. Your baby may also need a medication to slow down their heartbeat. Neonatal Graves disease usually goes away within a few weeks to a month, but Graves disease may rarely recur during the first 6–12 months of age. Your healthcare team will make a plan to follow up and monitor your baby's thyroid hormone levels, growth and development.

Anti-thyroid medication

One medication that is frequently used to treat high levels of thyroid hormone is called **methimazole** (trade name **Tapazole®**). For a baby, this medication can be compounded into a liquid form so that babies can take it by mouth. Usually a hospital or specialized pharmacy can compound the medication. There are other medications that are less commonly used instead of methimazole to lower the thyroid hormone levels.

Some key points to giving the medication:

- Depending on the response to the medication, it may be given once or twice per day.
- An oral syringe can be used to give medication to a baby.
- It is recommended to give the medication before a feed.
- If the baby spits up within 30 minutes of taking the medication, the dose should be repeated.
- If it has been more than 30 minutes since giving the dose of medication, enough of the medication will have been absorbed, and there is no need to repeat the dose.

Some side effects to watch for when taking methimazole include:

- a red itchy rash all over the body
- nausea, vomiting, upset stomach
- decrease in white blood cells, which leads to bacterial infections
- effects on the liver or kidneys

You should page the on-call Endocrinologist at **604-875-2161** if your baby experiences a high fever, yellowing of the eyes or skin, dark urine, or persistent vomiting.