Insulin Glargine

This sheet is about exposure to insulin glargine in pregnancy and while breastfeeding. This information is based on available published literature. It should not take the place of medical care and advice from your healthcare provider.

What is insulin glargine?

Insulin glargine is a long-acting medication used to treat type 1 and type 2 diabetes. It is an artificial form of insulin that works by replacing insulin that would usually be made by the body. Some brand names are Basaglar®, Lantus®, Semglee®, and Toujeo®.

Sometimes when people find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take your medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

People who are using insulin to manage their diabetes might need to adjust the amount of medication they take as the pregnancy goes on. Having diabetes that is uncontrolled or not well controlled in pregnancy can increase the chance of miscarriage, birth defects, pregnancy complications, and stillbirth. MotherToBaby has a fact sheet on type 1 and type 2 diabetes here: https://mothertobaby.org/fact-sheets/type-1-and-type-2-diabetes/ and on gestational diabetes here: https://mothertobaby.org/fact-sheets/diabetes-pregnancy/.

I take insulin glargine. Can it make it harder for me to get pregnant?

Taking insulin glargine is not expected to make it harder to get pregnant.

Does taking insulin glargine increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. In over 800 reports of people taking insulin glargine during pregnancy, an increased chance of miscarriage was not reported.

Does taking insulin glargine increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Taking insulin glargine is not expected to increase the chance of birth defects above the background risk. In over 800 reports of people taking insulin glargine throughout pregnancy, no increase in birth defects was reported. In studies that compared the rates of birth defects in pregnancies exposed to insulin glargine and pregnancies exposed to other medications to control type 1 and type 2 diabetes, no increased chance of birth defects above the background risk was reported.

Does taking insulin glargine in pregnancy increase the chance of other pregnancy-related problems?

It is unclear if taking insulin glargine can increase the chance of other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

One study looked to see if different forms of insulin to treat type 1 diabetes during pregnancy might affect the growth of the fetus. Looking at the pregnancies of those using insulin glargine versus a different form of insulin (human-made insulin), babies being small for gestational age (SGA) (smaller in size compared to babies of the same age) was reported more often. However, when looking at growth compared to the pregnancies treated with any insulin medication for type 1 diabetes, the chance for SGA was not increased.

Poorly controlled diabetes increases the chance of health and pregnancy complications. It is important that your condition is well-treated before, during, and after pregnancy.

Does taking insulin glargine in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if insulin glargine can cause behavior or learning issues for the child.

Breastfeeding while taking insulin glargine:
Insulin glargine is a normal part of breastmilk and using it while breastfeeding is not expected to cause problems for the breastfed infant. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a male takes insulin glargine, could it affect fertility or increase the chance of birth defects?

Studies have not been done to see if insulin glargine could affect male fertility (ability to get partner pregnant) or increase the chance of birth defects above the background risk. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references.