Beta Blockers

This sheet talks about exposure to beta-blockers in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What are beta-blockers?
Beta-blockers are a large group of medications that can be used to treat a variety of conditions like high blood pressure, heart conditions, glaucoma, overactive thyroid problems, and anxiety. Beta-blockers work by slowing the heart rate and opening up blood vessels to improve blood flow. Some common examples of beta-blockers include: acebutolol (Sectral®), atenolol (Tenormin®), carvedilol (Coreg®), labetalol (Trandate® and Normodyne®), metoprolol (Lopressor® and Toprol®), nadolol (Corgard®), propranolol (Inderal®) and timolol ophthalmic solution (Timoptic®).

Since this is a large group of different medications that can be used to treat different problems, it is very important to discuss your exact medication and health condition with your healthcare provider. You can also contact MotherToBaby with questions about your specific medications.

I take beta-blockers. Can it make it harder for me to get pregnant?
Studies have not been done to see if beta-blockers could make it harder for a woman to get pregnant.

I just found out that I am pregnant, should I stop taking my beta-blocker?
Talk with your healthcare provider before making any changes to your medications. It is important to control your symptoms during pregnancy. Some uncontrolled medical conditions may increase the chance for complications for both mother and baby.

Does taking beta-blockers increase the chance for miscarriage?
Miscarriage can occur in any pregnancy. Not every beta-blocker has been studied to see if it increases the chance for a miscarriage.

Does taking beta-blockers in the first trimester increase the chance of birth defects?
In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. A small number of studies done so far do not show a higher chance of birth defects in the babies of women who use beta-blockers during pregnancy. However, not every beta-blocker has been studied for birth defects. You should talk with your healthcare provider or a MotherToBaby information specialist about your specific medication and if there are any known risks to a pregnancy.

Could taking beta-blockers in the second or third trimester cause other pregnancy complications?
Some beta-blockers have been associated with reduced growth of the baby. However, it is not clear if this is due to the maternal medical condition (such as high blood pressure), the medication, or a combination of both.

I need to take beta-blockers throughout my entire pregnancy. Can taking beta-blockers near delivery cause problems for the baby?
There have been a few reports of beta-blockers taken by mouth (orally) leading to an infant having symptoms such as slowed heart rate (bradycardia), low blood sugar, and breathing difficulty. These symptoms are temporary (lasting 24-48 hours). Make sure your healthcare provider is aware of your use of beta-blockers at the time of delivery so that they monitor the baby as needed.

**Can I breastfeed while taking a beta-blocker?**

The amount of beta-blockers found in breastmilk varies depending on the exact medication. Atenolol, acebutolol and nadolol are present in high amounts in breast milk and not recommended while breastfeeding. Propranolol, labetalol, and metoprolol have been found in only small amounts in breastmilk and are considered compatible with breastfeeding.

Be sure to talk to your healthcare provider about all your breastfeeding questions.

**If a man takes beta-blockers, could it affect his fertility (ability to get partner pregnant) or increase the chance of birth defects?**

An association between the use of propranolol by men and reduced sexual function has been reported. It is not clear if this would increase the chance for difficulty in getting pregnant.

In general, exposures that fathers 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/pdf/.

**Selected References:**

- Xie RH, et al. 2014. Beta-blockers increase the risk of being born small for gestational age or of being institutionalised during infancy. BJOG. 121(9):1090-6.

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