Metoprolol

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. This sheet talks about whether exposure to metoprolol may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

What is metoprolol?
Metoprolol is a drug known as a beta-blocker. Brand names for this drug are Lopressor®, Toprol®, Apo-Metoprolol®, Betaloc®, Novo-Metoprolol® and Minimax®. Metoprolol is used to treat high blood pressure, fast heart rate, and migraines. MotherToBaby has a general fact sheet on beta-blockers which can be found at: https://mothertobaby.org/fact-sheets/beta-blockers/pdf/.

How long does metoprolol stay in the body? Should I stop taking it before I try to get pregnant?
People eliminate medications from their bodies at different rates. On average, metoprolol can stay in the body for about two days. You should not stop taking any medication without first talking with your health care provider. For some people, stopping this medication abruptly could have an adverse effect on the heart. If you do get pregnant while taking metoprolol, tell your healthcare provider.

Can the use of metoprolol cause a miscarriage?
Studies on pregnant women have not been done to see if there is any increase in miscarriage while taking metoprolol in early pregnancy.

Can taking metoprolol in the first trimester cause a birth defect?
There is not enough information available to know if first trimester use of metoprolol can cause birth defects. Metoprolol did not cause birth defects when given to animals early in pregnancy. A study of a large number of pregnancies found that beta-blockers did not cause heart defects in babies.

Can taking metoprolol cause other pregnancy complications?
Metoprolol has been associated with reduced growth of the baby. However, it is not clear if this happens because of the metoprolol, the health condition that the metoprolol is used for, or both.

Can taking metoprolol near delivery cause problems for the baby?
Metoprolol use in late pregnancy may cause the baby to have symptoms of the drug acting on its heart, blood vessels, and metabolism. Symptoms would include slowed heart rate and low blood sugar.

I am breastfeeding, can I take metoprolol?
Yes. Metoprolol can be taken during breastfeeding. It has been found only in small amounts in breastmilk. If you are worried about any symptoms the baby has, contact the child’s healthcare provider. Be sure to talk to your health care provider about all of your breastfeeding questions.

What if the father of the baby takes metoprolol?
In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet on Paternal Exposures and Pregnancy (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.

May, 2018