ACE Inhibitors

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

**What is an ACE inhibitor?**

Angiotensin-converting-enzyme (ACE) inhibitor is the name used to describe a group of medications used to treat high blood pressure. They have also been used for treating problems with the heart and kidneys.

ACE inhibitors are sold under many names, such as: benazepril (Lotensin®), captopril (Capoten®), cilazapril (Inhibace®), enalapril (Vasotec®, Renitec®), fosinopril, imidapril (Tanatril®), lisinopril (Listril®, Lopril®, Novatec®, Prinivil®, Zestril®), moexipril (Univasc®), perindopril (Aceon®), quinapril (Accupril®), ramipril (Altace®, Prilace®, Ramace®, Ramiwin®, Triatec®, Tritace®, trandolapril (Goften®, Mavik®, Odrik®) and zofenopril.

**I take an ACE inhibitor. Can it make it harder for me to get pregnant?**

Studies have not been done to see if ACE inhibitors could make it harder to get pregnant.

**I just found out I am pregnant. Should I stop taking my ACE inhibitor?**

Talk with your healthcare providers before making any changes to how you take your medication(s). They will work with you to determine the most appropriate way to treat your blood pressure. It is important to maintain a healthy blood pressure.

**Can high blood pressure during my pregnancy cause problems?**

Uncontrolled high blood pressure that starts before pregnancy or before the 20th week of pregnancy can cause slow growth, low birth weight, or preterm delivery (birth before 37 weeks of pregnancy). Some people develop elevated blood pressure after the 20th week of pregnancy (known as preeclampsia). Treatment depends on how high the blood pressure is and other factors.

**Does taking ACE inhibitors increase the chance for miscarriage?**

Miscarriage can occur in any pregnancy. It is not known if ACE inhibitors increase the chance for miscarriage.

**Does taking ACE inhibitors in the first trimester 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. There is no proven risk of birth defects with first trimester use of ACE inhibitors. The majority of studies have not found birth defects to occur more often in those who took or were prescribed an ACE inhibitor in the first trimester of their pregnancy. It is difficult to study medications as a group because even though the ACE inhibitors work in similar ways, there are some differences among the individual medications. When drugs are studied as a group, differences for individual drugs could be missed. Also, problems reported in studies may be related to high blood pressure itself, and might not be due to the medication.

**Could taking ACE inhibitors in the second or third trimester cause other pregnancy complications?**

ACE inhibitors should be avoided during the second and third trimester of pregnancy. When used after the first trimester, ACE inhibitors can cause low levels of amniotic fluid (fluid that surrounds the baby). Low levels of amniotic fluid can lead to health problems for the developing baby. Some of these problems include poor lung development, poor growth, poor development of the skull bones, birth defects, problems with the development of the kidneys and in the most severe cases, death of the developing baby.

**I take an ACE inhibitor for high blood pressure and just found out that I am pregnant. What tests can be done to check the baby?**

If you took an ACE inhibitor during the first trimester, a detailed ultrasound to look at the unborn baby can be done in the second trimester. If you took an ACE inhibitor after the first trimester, repeated ultrasound scans to look for low fluid around the pregnancy and to monitor the growth of the baby may be offered. Your healthcare provider can help
to arrange any appropriate monitoring for you.

**Can I take ACE inhibitors while breastfeeding?**

It may be possible to breastfeed while taking an ACE inhibitor, depending on the medication. You can contact MotherToBaby to learn more about your specific medication(s). Be sure to talk to your healthcare provider and your child’s pediatrician about your medications and all of your breastfeeding questions.

**I take an ACE inhibitor. Can it make it harder for me to get my partner pregnant or increase the chance of birth defects?**

There is no evidence to suggest that a man’s use of an ACE inhibitor causes infertility or any birth defects. In general, exposures that fathers and 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/pdf/.

Please click here for references.