Proton Pump Inhibitors

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

What are proton pump inhibitors?

Proton pump inhibitors (PPIs) are a group of medicines that reduce stomach acid production and improve the symptoms of acid reflux, stomach and intestinal ulcers. Acid reflux occurs when acid from the stomach backs up into the esophagus and causes symptoms commonly known as "heart burn." Proton pump inhibitors work by decreasing acid production in the stomach, which reduces discomfort. Examples of proton pump inhibitors include: dexlansoprazole (Dexilant®), omeprazole (Prilosec®) and esomeprazole (Nexium®) https://mothertobaby.org/fact-sheets/omeprazole-esomeprazole/, lansoprazole (Prevacid®), pantoprazole (Protonix®), and rabeprazole (Aciphex®).

I take proton pump inhibitors. Can it make it harder for me to get pregnant?

Information on the use of PPIs and fertility is limited. Based on the available information, PPIs are not expected to make it harder to become pregnant.

I just found out that I am pregnant. Should I stop taking my PPI?

Talk with your healthcare providers before making any changes to how you take your medication. The benefits of being treated need to be weighed against the risks of untreated illness. Your healthcare providers can help you decide what treatment is best for you and your pregnancy.

Can taking PPIs increase the chance for miscarriage?

Miscarriage may can occur in any pregnancy. Available information does not suggest a higher chance for miscarriage with the use of PPIs during pregnancy.

Can taking PPIs during pregnancy 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. The available studies suggest that it is unlikely that proton pump inhibitors would increase the chance for birth defects over the background risk.

Omeprazole is the best studied of the proton pump inhibitors. Multiple studies including over 6,610 people who were pregnant and exposed to omeprazole, 1,630 exposed to lansoprazole, 560 exposed to pantoprazole, 700 exposed to esomeprazole, and 44 exposed to rabeprazole have shown no increase in the chance of birth defects.

Could taking proton pump inhibitors cause other pregnancy complications?

Available information does not suggest a higher chance for low birth weight or preterm delivery (delivery before 37 weeks of pregnancy) with the use of PPIs during pregnancy.

Does taking proton pump inhibitors in pregnancy cause long-term problems in behavior or learning for the baby?

Studies have not been done to determine if proton pump inhibitors can cause behavior or learning issues.

Can I breastfeed while taking a PPI?

PPIs enter the breastmilk in small amounts. They will be broken down in the baby’s stomach acid and will not be absorbed. These medications are sometimes given directly to infants with reflux, making them less likely to be a concern for a breastfeeding infant. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

I take a PPI. Can it make it harder for me to get my partner pregnant or increase the chance of birth defects?
This has not been well studied. One study reported pantoprazole may reduce sperm movement and ability to fertilize an egg. Another study looking at lansoprazole reported a decrease in sperm motility. In general, exposures that fathers or sperm donors have are unlikely to increase the 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.