Proton Pump Inhibitors

This sheet is about exposure to proton pump inhibitors in 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 medications that have been used to treat the symptoms of acid reflux, gastroesophageal reflux disease (GERD) and 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 lowering acid production in the stomach. Examples of proton pump inhibitors include: dexlansoprazole (Dexilant®), omeprazole (Prilosec®) and esomeprazole (Nexium®), lansoprazole (Prevacid®), pantoprazole (Protonix®), and rabeprazole (Aciphex®). For questions about a specific PPI, talk with your healthcare provider or a MotherToBaby specialist.

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.

I take proton pump inhibitors. Can it make it harder for me to get pregnant?
Based on the available information, PPIs are not expected to make it harder to get pregnant.

Does taking PPIs increase the chance of miscarriage?
Miscarriage is common and can occur in any pregnancy for many different reasons. Available information does not suggest a higher chance of miscarriage with the use of PPIs during pregnancy.

Does 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 above the background risk.

Does taking proton pump inhibitors increase the chance of other pregnancy-related problems?
Available information does not suggest a higher chance for 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) with the use of PPIs during pregnancy.

Does taking proton pump inhibitors in pregnancy affect future behavior or learning for the child?
Studies have not been done to see if PPIs can cause behavior or learning issues for the child.

Breastfeeding while taking a PPI:
PPIs enter breastmilk in small amounts. The medication is 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. For questions about using a specific PPI while breastfeeding, talk with your healthcare provider or a MotherToBaby specialist. Also, be sure to talk to your healthcare provider about all of your breastfeeding questions.

If a male takes proton pump inhibitors, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?
One study reported pantoprazole may reduce sperm movement and ability to fertilize an egg. Another study looking at lansoprazole reported a decrease in sperm movement. 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.