Ondansetron (Zofran®)

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

What is ondansetron?

Ondansetron is a medication used to treat nausea and vomiting that may be caused by surgery, chemotherapy, or radiation therapy. Ondansetron has also been prescribed during pregnancy to help with symptoms of nausea and vomiting in pregnancy (NVP). NVP is also referred to as “morning sickness”. Ondansetron is taken by mouth, infused into a vein (by IV) or given by injection into a muscle (IM). Ondansetron is sold under the brand name Zofran®.

What can I do to help control my nausea and vomiting?

MotherToBaby has a helpful fact sheet on nausea in pregnancy with recommendations. You can review it here: https://mothertobaby.org/fact-sheets/nausea-vomiting-pregnancy-nvp/pdf/. Also, eating small meals often, drinking plenty of clear fluids, and avoiding triggers (such as odors, heat, and spicy or high fat foods) can help. Talk to your healthcare provider about which NVP treatments are right for you.

I take ondansetron. Can it make it harder for me to become pregnant?

There are no studies that have looked to see if ondansetron could make it harder for a person to get pregnant. Studies in animals did not find that ondansetron would affect the ability to get pregnant.

Does taking ondansetron increase the chance for miscarriage?

Miscarriage can occur in any pregnancy. One study did not find that miscarriage happened more often for those who reported that they used ondansetron in the first trimester of pregnancy.

Does taking ondansetron 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. Most studies have found no increased chance for birth defects among thousands of people who used ondansetron in the first trimester of pregnancy.

A few studies reported a very small (less than 1%) increase in the chance for a cleft palate (an opening in the roof of the mouth that may be repaired with surgery) or a heart defect. Because of other factors that could affect the pregnancies exposed to ondansetron, it is not known if ondansetron actually increases the chance of birth defects.

Could taking ondansetron cause other pregnancy complications?

Studies did not find a higher chance of pregnancy loss, preterm delivery (delivery before 37 weeks of pregnancy), or low birth weight when ondansetron was used during pregnancy.

At higher doses, there have been reports that ondansetron use might cause a heart rhythm problem (called QT interval prolongation) in the person taking ondansetron. In severe cases, this could become an abnormal heart rhythm known as Torsades de Pointes. If you are taking ondansetron, you can talk to your healthcare provider about how to watch for changes in your heart rhythm.

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

One study looked at 78 infants who were exposed to ondansetron at any time during pregnancy. The infants were looked at between 7 days to 2 months of age and did not show any signs of unusual behaviors. A single follow-up survey for about 25 of these children was sent in by the parents. The children were between 1½ to 5½ years old. The survey asked about behavior. The surveys did not report behavior differences in these children compared to children who were not exposed ondansetron during pregnancy. There are no other studies looking at the use of ondansetron in pregnancy and long-term effects for the baby.

Can I breastfeed while taking ondansetron?
There have been no studies in humans looking at the use of ondansetron during breastfeeding. Studies in animals suggest that ondansetron enters breast milk, but the effects of ondansetron on a breastfeeding infant are not known. If ondansetron use is necessary, it is not usually a reason to stop breastfeeding. A different drug may be considered, especially while breastfeeding a newborn or preterm infant. Be sure to talk to your healthcare provider about all your breastfeeding questions.

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

There are no human studies looking at male use of ondansetron. Animal studies have not shown any effect on male fertility. In general, exposures that fathers and sperm donor 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.