



MotherToBaby

Medications & More During Pregnancy & Breastfeeding
Ask The Experts

Fact Sheet

by the **Organization of Teratology Information Specialists (OTIS)**

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Metronidazole (Flagyl®)

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 metronidazole 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 metronidazole?

Metronidazole is an antibiotic used to treat different kinds of infections. It is available in oral, rectal, vaginal and topical preparations. Metronidazole is commonly used for vaginal infections for which pregnant women can require treatment. It has been on the market for more than 40 years, and is sold under the brand name Flagyl®.

Can taking metronidazole during early pregnancy increase the risk for miscarriage?

It's unlikely. There is one large study that looked at over 4000 pregnancies with exposure to metronidazole early in pregnancy and did not find an increased risk for miscarriage.

Can taking metronidazole during pregnancy cause birth defects or other harmful effects on the baby?

Unlikely. Use of metronidazole previously raised some concerns. Older studies suggested an association between metronidazole and an increase in various birth defects. However, these studies had flaws that make it difficult to be sure if those birth defects were caused by metronidazole. In contrast, more recent studies and reviews that have looked at thousands of women exposed to this drug in early pregnancy could find no evidence that using metronidazole during pregnancy increases the risk for birth defects or other harmful effects on the baby. While some sources still state that this drug should not be used during the first trimester or at all in pregnancy, the current data do not support an increased risk for birth defects or other harmful effects on the baby.

What if I use metronidazole topically (on the skin) or vaginally?

Metronidazole that is used on skin (topical preparations) is minimally absorbed and not likely to result in significant levels in your blood. However, vaginal use of metronidazole may result in more absorption of the medication into your system. Since most studies show that metronidazole doesn't increase risk when it is taken in pill form, both vaginal and topical uses are not thought to increase risks to your pregnancy.

Can I take metronidazole any time during pregnancy?

Currently there is no evidence to suggest that metronidazole places a pregnancy at risk at any stage. A recent study looked at over 900 women who had taken metronidazole sometime during their pregnancy and there was no increased risk for preterm birth (birth before 37 weeks), low birth weight, or congenital anomalies. For some conditions, metronidazole is the only drug of choice and it is especially important to treat vaginal infections during pregnancy.

I have heard that this drug may cause cancer. Is this true?

Metronidazole has been shown to cause changes in genetic material and cancer in animals. At this time, it has not been found to have these effects in humans. One study that followed several hundred women for 20 years did not find an increase in cancer.

Can I take metronidazole while breastfeeding?

Metronidazole gets into breast milk in relatively large amounts, with some reports of up to 20% of the mother's

dose. However, this dose is well below the therapeutic dose given to treat young infants who were able to tolerate this drug with minimal side effects. After a breastfeeding mother has taken metronidazole, the infant may experience loose stools, especially when the drug is given directly into a vein (intravenously). Also, no harmful effects were seen in 35 breastfed babies whose mothers were taking metronidazole. Be sure to talk to your health care provider about all your choices for breastfeeding.

What if the father of the baby takes metronidazole?

There are currently no studies in humans to suggest that use of metronidazole by the father would negatively affect the sperm or increase the risk for birth defects. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at <http://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/>.

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