Miconazole|Clotrimazole

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 miconazole or clotrimazole may increase the risk for birth defects above that background risk. This information should not take the place of medical care and advice from your health care provider.

What is miconazole?
Miconazole is an antifungal medicine used to treat different infections. It is commonly placed in the vagina for the treatment of vaginal yeast infections. Miconazole creams can also be put on the skin for localized fungal infections. Miconazole is most commonly recognized by the brand name Monistat® for treatment of vaginal yeast infections. Vaginal creams are applied once per day for 1 day, 3 days, or 7 days. The longer the treatment, the smaller the concentration of medicine that is used. Some experts recommend the longer treatment during pregnancy to lower the chance the infection will happen again. Your health care provider can help you decided which treatment is right for you.

Is clotrimazole the same as miconazole?
Clotrimazole is another antifungal medicine used to treat different infections. Like miconazole, it is placed in the vagina for the treatment of vaginal yeast infections. Clotrimazole creams can also be put on the skin for localized fungal infections. Clotrimazole is sold under different brand names including Femcare®, Lotrimin®, and Mycelex®.

Is it true that women get more yeast infections while pregnant?
Yes. Pregnant women are more likely to get yeast infections than non-pregnant women. This may be due to higher estrogen and sugar content in vaginal secretions that create a desirable environment for yeast.

I think I have a vaginal yeast infection and I am pregnant. Should I try an over-the-counter antifungal cream?
If you think you have a vaginal yeast infection during pregnancy, it’s important to see your health care provider to be sure of the diagnosis. If you have another kind of vaginal infection, it may be important to treat it differently.

Do medications applied to the skin or vagina get to the baby?
When compared to oral (pill) medicines, topical (on the skin) or vaginal medicines enter your body in lower amounts, so less gets to the developing baby. Topical preparations of miconazole and clotrimazole are not well absorbed so they are unlikely to be a concern for the pregnancy. Vaginal use of miconazole or clotrimazole likely results in a higher absorption of the medication into your system compared to skin, but absorption is still low.

Will taking miconazole or clotrimazole during early pregnancy increase the risk for miscarriage?
A single study suggested a small increased risk for miscarriage with miconazole and clotrimazole, but there were several problems with this study. There is no other evidence that miconazole or clotrimazole increases risk for miscarriage.

Can taking miconazole or clotrimazole during the first trimester of pregnancy cause birth defects?
Miconazole and clotrimazole are commonly recommended during pregnancy to treat yeast infections. Most studies have shown that at low doses (<400 mg/d) there was no significant increased risk of major birth defects in the babies of women who used miconazole or clotrimazole topically or intravaginally during pregnancy.
Some questions have been raised about the use of miconazole with other medications, particularly metronidazole, another popular antibiotic, and the risk of birth defects. A few studies suggest a possible increased risk...
of abnormalities of the hands and bones when these medications are used together. There is not enough data from these studies to prove an association; more studies are needed to understand the possible effects of using these medications together during pregnancy.

Is it safe for me to use miconazole or clotrimazole while breastfeeding?

There are currently no studies looking at miconazole or clotrimazole use during breastfeeding. However, because only small amounts of miconazole or clotrimazole could pass into breastmilk when used topically or intravaginally, breastfeeding is not thought to be a concern. Miconazole and clotrimazole have also been used directly on infants to treat fungal infections. Be sure to talk to your health care provider about all your choices for breastfeeding.

What if the father of the baby takes miconazole or clotrimazole?

There are no studies looking at possible risks to a pregnancy when the father takes miconazole. 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://www.mothertobaby.org/files/paternal.pdf](http://www.mothertobaby.org/files/paternal.pdf).

Selected References:
- Tiboni GM et al. 2008. Teratogenic effects in mouse fetuses subjected to the concurrent in utero exposure to miconazole and metronidazole. Reprod Toxicol. 26(3-4):254-61

January, 2014