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Tretinoin (Retin-A[®]) and Pregnancy

This sheet talks about the risks that exposure to tretinoin can have during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. This information should not take the place of medical care and advice from your health care provider.

What is tretinoin?

Tretinoin is a cream that is applied to the skin and used to treat acne and other skin problems. Brand names for tretinoin include Atralin[®], Avita[®], Retin-A[®], Renova[®] and Tretin-X[®]. Tretinoin belongs to a group of medications called the retinoids; all of these medications are related to Vitamin A which is required in small amounts for normal development. Other medications in the retinoid family are isotretinoin (Accutane[®]), acitretin (Soriatane[®]) and adapalene (Differin[®]).

My doctor said that tretinoin is like isotretinoin, and I've heard that isotretinoin causes birth defects. Can using tretinoin during pregnancy cause birth defects?

When women take isotretinoin in the first 12 weeks of pregnancy, certain birth defects can occur. For this reason, health care professionals recommend that women not take isotretinoin during pregnancy. Isotretinoin, however, is taken by mouth. It enters the mother's bloodstream and is then passed on to the baby.

Topical tretinoin is different. It is applied to the skin. Usually, less than 10% of tretinoin passes into the mother's bloodstream, and even less reaches the baby. Broken skin, using more than is needed on an area, or use on a large area will cause more of the tretinoin to pass through the skin. In general, the less tretinoin that is used on the mother's skin, the less likely there will be risks to the baby.

I have acne. Can I use tretinoin while I'm pregnant?

Several studies have tried to find out the effects of tretinoin on pregnancy. These studies have not found that babies whose mothers used tretinoin during pregnancy are any more likely to have birth defects than babies whose mothers did not use tretinoin.

There have been four reports of babies born with birth defects after their mothers used tretinoin during pregnancy. Usually, a few reports do not cause health professionals to worry, but the birth defects reported in these four cases are like the defects seen in babies whose mothers took isotretinoin during pregnancy. Since tretinoin and isotretinoin are related, it is possible that these two medications can affect the baby in the same way. However, because many women use tretinoin during pregnancy and there are only these four reports, the risk for the same kinds of birth defects is probably low. However, it may be a good idea not to use tretinoin in pregnancy due to the possible risks.

I am using tretinoin now, but would like to stop using it before becoming pregnant. How long should I wait after I stop using it before I try to get pregnant?

Tretinoin stays in the body for about one week after you stop using it. The makers of isotretinoin suggest that women stop using it one month before trying to get pregnant. Based on this suggestion for isotretinoin, a safe

approach would be to stop using tretinoin one month before trying to get pregnant.

Can tretinoin make it more difficult for me to get pregnant?

To date, we do not know whether use of tretinoin makes it harder for women to become pregnant.

If I stop using tretinoin in the first trimester, is it okay to start using it again in the last two trimesters of my pregnancy?

During the first three months of pregnancy, the baby's organs are forming. In months four through nine, the baby's body and brain are growing. It is expected that any effect tretinoin has would be like the effect of isotretinoin on a pregnancy. Since isotretinoin acts on the organs that are forming during the fourth to seventh week of pregnancy, we expect that any effects of tretinoin would happen during the same time. However, because no studies have been done to look at tretinoin's effect on the brain of children as they get older, you may want to ask your doctor about using a different medication throughout pregnancy. If you do use tretinoin in the last two-thirds of your pregnancy, any increased risk is likely to be small.

Are there any tests available to find out if the medication has affected my pregnancy?

Ultrasounds can be done to look at the way the baby's organs have formed and the growth of the baby, but not all birth defects can be found by ultrasound. Other tests done during pregnancy, such as chorionic villus sampling and amniocentesis, cannot find birth defects caused by isotretinoin or related medications.

Can I use tretinoin while I am breastfeeding?

When used on your skin, it is known that very little tretinoin passes into your body, and so the amount in breast milk would probably be very little to none. Tretinoin use during breastfeeding has not been studied.

However, a related medication (acitretin) has been studied and is rated by the American Academy of Pediatrics as usually compatible with breastfeeding. You may wish to talk to your health care provider about any concerns you have with use of this medication while breastfeeding.

What if the father of the baby uses tretinoin?

There are no studies looking at possible risks to a pregnancy when the father uses tretinoin. In general, substances that the father is exposed to would not increase the risk to a pregnancy because the father does not share a blood connection with the developing baby. For more information, please see the OTIS fact sheet *Paternal Exposures and Pregnancy*.

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If you have questions about the information on this fact sheet or other exposures during pregnancy, call OTIS at 1-866-626-6847.