



MotherToBaby

Medications & More During Pregnancy & Breastfeeding
Ask The Experts

Fact Sheet

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

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Tretinoin (Retin-A®)

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 topical tretinoin 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 tretinoin?

Topical tretinoin is a chemical that is applied to the skin to treat acne and other skin problems. Some brand names for tretinoin include Atralin®, Avita®, Retin-A®, Renova®, Refissa® and Tretin-X®.

Tretinoin belongs to a group of medications called the retinoids. Retinoids are related to Vitamin A which is required in small amounts for normal development. Other medications in the retinoid family are isotretinoin (Accutane®, Claravis®), acitretin (Soriatane®) and adapalene (Differin®). Tretinoin is available in an oral form (to take by mouth) for the treatment of leukemia. This sheet will discuss the topical (applied to skin) use of tretinoin.

My health care provider said that tretinoin is like isotretinoin, and I've heard that isotretinoin causes birth defects.

When women take isotretinoin in the first 12 weeks of pregnancy, certain birth defects can occur. For this reason, health care providers 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.

Tretinoin, because it is applied to the skin (topical), is different. Low amounts of tretinoin pass through the skin 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 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 less than a day after you stop using it. The makers of isotretinoin suggest that women stop using isotretinoin 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.

If I am using topical tretinoin for acne, could I have a greater chance for a miscarriage?

The topical use of tretinoin is not expected to increase the chance for miscarriage.

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

Several studies have tried to learn if topical tretinoin use could harm a pregnancy. These studies have not found a greater chance for birth defects or premature delivery (delivery before week 37) with proper topical use.

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 providers to worry, but the birth defects reported in these four cases are like the birth 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. 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 is generally recommended not to use tretinoin in pregnancy.

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. Because the organs form in the first trimester, tretinoin use in the second and third trimesters is unlikely to cause a birth defect. However, because no studies have been done to look at possible effects of tretinoin when used in the 2nd or 3rd trimester, avoiding this product may be the best course of action.

Can I use tretinoin while I am breastfeeding?

When used on your skin, 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. Be sure to talk to your health care provider about all of your breastfeeding questions.

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, 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 <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

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