Thalidomide and Pregnancy

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 thalidomide 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 thalidomide?

Thalidomide is a sedative agent that also changes the body’s immune response and reduces the ability of the body to grow new blood vessels. Thalidomide was one of the first drugs recognized to cause birth defects in humans. Although thalidomide was not released in the United States until 1998, it is now being used for treatment of several medical conditions including leprosy, cancer, and complications from HIV infection.

After I stop taking thalidomide, how long should I wait to become pregnant?

The half-life of thalidomide is about 7, which is the time it takes for 50% of the drug to be cleared from your body. Therefore, after a couple days, any remaining drug level would be fairly low.

To be safe, it is recommended that women stop use of thalidomide one month before conception, and at least 4 weeks after therapy is stopped, to reduce the risk of thalidomide-related birth defects.

There are no studies on pregnancy outcome in women who only used thalidomide prior to conception. All infants known to have thalidomide-related birth defects were exposed during the first trimester of pregnancy.

Can thalidomide make it more difficult for me to become pregnant?

No. To date, there are no reports linking thalidomide use and infertility. However, because thalidomide can damage the developing fetus early in pregnancy, often before a woman recognizes she is pregnant, it is important that very effective methods of birth control be used. Therefore, it is recommended that two different and reliable methods of birth control be used if a woman is taking thalidomide. The manufacturer developed the STEPS (System for Thalidomide Education and Prescribing Safety) program to help prevent exposure to pregnant women.

Can taking thalidomide during pregnancy cause birth defects in my baby?

Yes. When a pregnant woman takes thalidomide early in pregnancy, there is a risk of approximately 20% or greater to have a baby with birth defects such as extremely short or missing arms and legs, missing ears (both outside and inside), and deafness. There is also a risk of other problems such as heart defects, missing or small eyes, paralysis of the face, kidney abnormalities, gastrointestinal/genital/urinary tract abnormalities, poor growth and mental retardation. The risk for fetal harm if the drug is taken after the first trimester is unknown.

Will taking thalidomide have an effect on my baby’s behavior and development?

The only long-term studies of thalidomide exposure during pregnancy have been done on children born with birth defects. Some of these children were mentally retarded or had behavioral conditions such as autism. The possible long-term effects on children exposed to thalidomide but who were not born with birth defects are unknown.

Does thalidomide cause an increased risk for miscarriage or infant death?

Yes. The fetal and infant death rate with maternal thalidomide use is estimated to be as high as 40% or greater. The cause of death has been attributed to the severe birth defects caused by the thalidomide exposure.
If I get pregnant while taking thalidomide, what should I do?

Thalidomide should be stopped immediately if a period is missed, you have a positive pregnancy test, or abnormal menstrual bleeding. If you become pregnant during treatment, contact your health care provider right away. Your health care provider will discuss whether you should discontinue your medication, as well as the possibilities for prenatal testing. Prenatal testing involves a detailed ultrasound to look at the baby’s body and organs. Ultrasound can visualize many birth defects, but is not able to detect all potential fetal problems caused by a thalidomide exposure.

Can I take thalidomide while breastfeeding?

Thalidomide has not been studied during breastfeeding. Based on its chemical properties, it is expected to pass into breast milk. The drug may cause drowsiness in a breastfed infant, but the exact effects of thalidomide on the breastfed infant are unknown. Until more is known, it is not recommended that women breastfeed while taking thalidomide. Be sure to talk to your health care provider about all your choices for breastfeeding.

If a man uses thalidomide, will it cause birth defects in his children?

There are no reports in the literature that suggest the use of thalidomide in men is associated with an increased risk of birth defects. However, thalidomide is excreted in semen, often at levels higher than found in blood. It is recommended that men taking thalidomide use latex or synthetic condoms during intercourse, and for 28 days after stopping thalidomide. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at http://www.mothertobaby.org/files/paternal.pdf.

References: