Tetracycline 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 tetracycline 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 tetracycline?

Tetracycline is an antibiotic used to treat conditions such as acne and infections. It belongs to a group of antibiotics that includes minocycline, oxytetracycline, doxycycline. In general, the information in this fact sheet applies to tetracycline and these related antibiotics. Tetracycline is usually taken orally (by mouth).

I am 14 weeks pregnant and I am taking tetracycline. If I stop taking it now, how long will tetracycline stay in my body?

Individuals break down medicines at different rates. On average, it takes less than 5 days for tetracycline to be cleared from the body. If you stop taking the medication now, your baby will not be exposed to tetracycline after one week. As with any medication, you should speak with your health care provider before you stop taking tetracycline.

I took tetracycline during the first trimester of my pregnancy. Is there a risk for birth defects?

Researchers have studied the outcome of pregnancies when women took tetracycline during the first trimester (the first 12 weeks). This is the time when all the body organs are forming in the baby. These studies have not shown an increased chance for major birth defects in children exposed to tetracycline in the first trimester of pregnancy.

There may be a small increased chance for minor birth defects such as an inguinal hernia. An inguinal hernia is when soft tissue around the stomach pushes through a weak place in the stomach muscles. It can usually be fixed by surgery. Right now, there is not enough information to be know if the chance for minor birth defects exists. If you are pregnant or planning a pregnancy, it is a good idea to talk to your health care provider about the use of tetracycline during your pregnancy.

Is there a risk for other problems if I take tetracycline at any time during pregnancy?

Yes. If you take tetracycline after the fourth month of pregnancy, there is a chance for discoloration (gray or yellowish brown) of the “baby” teeth. The discoloration of the baby teeth is due to calcification (hardening) of the teeth, which starts at about four months. Even though this appears to change the look of teeth, it does not seem to change the development of the outer covering of the teeth (enamel) or the chance of getting cavities. We do not know how many exposed babies will have tooth discoloration. It is suggested that the use of tetracycline be avoided after four months of pregnancy unless there is a special reason for your health care provider to prescribe medication.

I have heard that tetracycline also affects the bones of developing babies. Is this true?

Tetracycline appears to affect the calcification (hardening) of the bones and teeth, and it also appears to cause reduced growth of some bones while the baby is being exposed to the medication. Even though the tooth discoloration is permanent, the bone growth seems to return to normal after the exposure to tetracycline ends.

What if I am taking one of the other medications in this group such as minocycline, oxytetracycline, or doxycycline instead of tetracycline? Does that still put my baby at risk?
Since these antibiotics are like tetracycline, it is possible that they could also affect a baby’s teeth and bones in the same way if taken in the second and third trimesters of pregnancy. There are some reports of babies with dental discoloration after similar exposures. For this reason, it is best to use the same caution with these medications.

I am pregnant and I often get upper respiratory infections for which my health care provider prescribes tetracycline. If I get one of these infections later in pregnancy, what should I do?

Talk to your health care provider about taking tetracycline during pregnancy. Your health care provider may suggest a different medication to treat your infection.

I am breastfeeding and thinking about taking tetracycline. Can it still affect my baby?

In a baby, the bones and teeth continue to harden until one year of age. So, if a baby is exposed to tetracycline in breast milk, it could cause tooth discoloration and delayed bone growth. However, only very low levels of tetracycline pass into breast milk. At this time, there have been no problems reported in babies exposed to tetracycline through breast milk.

The World Health Organization (WHO) Working Group on Human Lactation states that when tetracycline is used for 7-10 days while nursing, the risk to the infant appears to be low. Other types of antibiotics may be suggested for use while breastfeeding. Be sure to talk to your health care provider about all your choices for breastfeeding.

What if the father of the baby takes tetracycline?

There is currently no information to suggest that use of tetracycline by the father would be harmful to 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 https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/.

References: