Prilocaine

This sheet talks about exposure to prilocaine in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is prilocaine?
Prilocaine is a local anesthetic. Local anesthetics are used to numb areas of the body for short periods of time. Prilocaine is approved for use as an injection (given by shot) during dental procedures. It has also been used for surgical procedures on larger areas of the body such as the foot.

Prilocaine is also found in a topical cream (used on the skin) called EMLA®. EMLA® cream also contains the medication lidocaine. For more information on lidocaine, please see the MotherToBaby fact sheet at: (this sheet is also being written and https address will be included).

There are case reports of people developing a medical condition called methemoglobinemia after exposure to prilocaine. Methemoglobinemia is when the blood does not deliver enough oxygen to the body’s cells. While anyone could develop this side effect from using prilocaine, it may be more likely to happen in some people than in others. One article that reviewed case reports of methemoglobinemia suggested that prilocaine should not be used in pregnant women. Talk with your healthcare providers about using prilocaine and any risks specific to you.

I was given a prilocaine injection by my dentist. Can that make it harder for me to get pregnant?
Studies have not been done to see if prilocaine could make it harder for a woman to get pregnant. An experimental animal study did not report that prilocaine would affect fertility (ability to get pregnant).

Does taking prilocaine increase the chance for miscarriage?
Miscarriage can occur in any pregnancy. Studies have not been done to see if prilocaine increases the chance for a miscarriage.

Does taking prilocaine in the first trimester increase the chance of birth defects?
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. Prilocaine has not been well studied for use in pregnancy. Experimental animal studies did not suggest that prilocaine would significantly increase the chance of birth defects.

Could taking prilocaine in the second or third trimester cause other pregnancy complications?
Prilocaine has not been well studied for use in pregnancy. However, just as there have been case reports of methemoglobinemia in adults after use of prilocaine, there have been case reports of methemoglobinemia in newborns after the mothers received prilocaine as part of their anesthesia during labor. There are also case reports without health concerns when prilocaine was used in labor.

Does exposure to prilocaine in pregnancy cause long-term problems in behavior or learning for the baby?
This is not known as prilocaine has not been well studied for use during pregnancy.

Can I breastfeed while taking prilocaine?
Prilocaine has not been well studied for use while breastfeeding. Be sure to talk to your healthcare provider about all of your breastfeeding questions.
If a man takes prilocaine, could it affect his fertility (ability to get partner pregnant) or increase the chance of birth defects?

This has not been well studied. 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/.

Selected References:

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