Lidocaine

This sheet is about exposure to lidocaine in pregnancy and while breastfeeding. This information is based on published research studies. It should not take the place of medical care and advice from your healthcare provider.

What is lidocaine?

Lidocaine is a local anesthetic that has been used to temporarily numb areas of the body. It is found in some over-the-counter pain creams and patches and can be injected for medical or dental procedures, nerve blocks, or spinal/epidural anesthesia. It is also used to treat abnormal heart rhythms (ventricular arrhythmia). Lidocaine can be given as an injection (shot), intravenously (by IV) and topically (on the skin).

Lidocaine and prilocaine can be found in a combination topical cream product called EMLA®. For more information on prilocaine, please see the MotherToBaby fact sheet at: https://mothertobaby.org/fact-sheets/prilocaine.

I take lidocaine. Can it make it harder for me to get pregnant?

Experimental animal studies did not find that lidocaine would affect fertility (ability to get pregnant). One study in humans reported no significant difference in rates of fertilization (when sperm meets the egg to form an embryo) between follicles exposed to lidocaine and those not exposed.

Does taking lidocaine increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done to see if lidocaine can increase the chance of miscarriage.

Does taking lidocaine increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like lidocaine, might increase the chance of birth defects in a pregnancy. One study in 293 women who were exposed to lidocaine during the first four months of pregnancy did not find a higher chance of birth defects. Also, human case reports and experimental animal studies do not suggest that lidocaine would significantly increase the chance of birth defects.

Does taking lidocaine in pregnancy increase the chance of other pregnancy related problems?

It is not known if lidocaine can increase the chance of other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth). There are a few case reports of side effects in newborns when lidocaine was used at the time of delivery. The infants in these case reports needed treatment for symptoms that included low muscle tone (“floppy”), dilated pupils, trouble breathing, apnea, and/or seizures. There are also case reports without health concerns in the newborn when lidocaine was used at the time of delivery.

Does taking lidocaine in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if lidocaine can increase the chance for behavior or learning issues for the child.

Breastfeeding while taking lidocaine:

Lidocaine gets into breastmilk in small amounts. The medication in the breastmilk is not well absorbed by the baby. Breastfeeding after receiving lidocaine is unlikely to cause problems for a nursing child. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a man takes lidocaine, could it affect his fertility or increase the chance of birth defects?

Studies have not been done to see if lidocaine could affect men’s fertility (ability to get a partner pregnant) or increase the chance of birth defects. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here to view references.

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