Ketamine (Ketalar®)

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

What is ketamine?

Ketamine (Ketalar®) is an anesthetic medication. An anesthetic is used with medical procedures, such as surgery, to help lower a person’s ability to feel pain and to make them less aware of what is happening. MotherToBaby has a fact sheet on general anesthesia at https://mothertobaby.org/fact-sheets/general-anesthesia-pregnancy/.

Ketamine has also been used to treat pain and for other medical conditions, such as asthma and major depressive disorder. MotherToBaby has fact sheets on asthma and depression at https://mothertobaby.org/fact-sheets/asthma-and-pregnancy/ and https://mothertobaby.org/fact-sheets/depression-pregnancy/.

Ketamine can also be misused recreationally. Street names for ketamine use includes K, K-Hole, Super K and Special K.

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

Studies in humans have not been done to learn if ketamine exposure could make it harder to get pregnant. However, an experimental animal study did not find that ketamine exposure affected fertility.

I just found out that I am pregnant and I use ketamine. What should I do?

Talk with your healthcare provider as soon as possible. If someone has been using ketamine regularly stopping suddenly (also called “cold turkey”) could cause withdrawal. It is not known what effect, if any, withdrawal from ketamine could have on a pregnancy. Your healthcare provider can give you advice on how best to stop using ketamine.

If you are misusing ketamine, you can also contact the National Drug Helpline at http://drughelpline.org/ or 1-888-633-3239.

Does taking ketamine increase the chance for miscarriage?

 Miscarriage can occur in any pregnancy. It is not known if using ketamine increases the chance for miscarriage. A few studies suggest a small increase in the chance for a miscarriage in people who had surgery with general anesthesia in the first half of pregnancy. However, it is unclear if this is small risk is due to the anesthesia, the body's response to surgery, illness in the person who was pregnant, or other factors.

Does taking ketamine increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. It is not known if ketamine exposure increases the chance for birth defects above the background risk. Experimental animal studies have shown that ongoing or high dose exposure could affect the brain and liver in a developing baby.

Could taking ketamine cause other pregnancy complications?

When used as an anesthetic at the time of delivery, there may be changes in uterine tone as well as frequency and strength of contractions. Changes in fetal heart rate or breathing trouble in the newborn have been reported. However, there are also reports of births without these findings. It may depend on the dose used and the amount of time the anesthesia is used.

There is a case report of a baby born with low muscle tone (called hypotonia or “floppy baby syndrome”) who was exposed to ketamine misuse throughout the pregnancy. The baby’s muscle tone improved over the first month of life. There have also been reports of babies born with elevated muscle tone (hypertonia) after ketamine was used for minor surgery during pregnancy.

Does taking ketamine during pregnancy cause long term problems in behavior or learning for the baby?
This is not known. Experimental animal studies have reported that ketamine exposure can affect brain development, which might affect learning and behavior. Individuals who are pregnant and need surgery, especially for life-threatening conditions, should not be discouraged from the use of general anesthesia. Talk with your healthcare providers about the benefits, risks, and best timing of surgery or procedures requiring general anesthesia.

Can I breastfeed while taking ketamine or if I was given ketamine during labor and delivery?

Ketamine has not been well studied for use while breastfeeding. It is not known how much ketamine gets into breastmilk. There are four case reports of infants who did not have side effects from breastfeeding after ketamine was given during labor. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

I take ketamine. Can it make it harder for me to get my partner pregnant or increase the chance of birth defects?

Ketamine has not been well studied for use in males who are trying to conceive a pregnancy. 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 at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references.