Ketamine

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 is an anesthetic medication. Anesthetics are 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 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 has also been used without a prescription or not as directed by a healthcare provider (misuse). Street names for ketamine use includes K, K-Hole, Super K and Special K. If you are misusing ketamine, you can also contact the National Drug Helpline at http://drughelpline.org/ or 1-888-633-3239.

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

Talk with your healthcare provider as soon as possible. If someone has been using ketamine regularly, stopping suddenly (called “cold turkey”) could cause withdrawal. It is not known what effect withdrawal could have on a pregnancy. Your healthcare provider can talk with you about any changes to your ketamine use.

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

It is not known if ketamine exposure could make it harder to get pregnant.

Does taking ketamine increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. A few studies suggest a small increased chance of miscarriage in people who had surgery with general anesthesia in the first half of pregnancy. However, it is unclear if this small risk is due to anesthesia, the body’s response to surgery, illness in the person who was pregnant, or other factors. As there can be many causes of miscarriage, it is often hard to know the exact cause.

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 of 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 fetus.

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

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. There are also reports of births without these findings.

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 more muscle tone (hypertonia) after ketamine was used for minor surgery during pregnancy.

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

Experimental animal studies have reported that ketamine exposure can affect brain development, which might affect learning and behavior. People 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 using general anesthesia.
Breastfeeding while taking ketamine or having received ketamine during labor and delivery:

Ketamine has not been well studied for use while breastfeeding. Small amounts of ketamine get 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 your breastfeeding questions.

If a male takes ketamine, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

It is not known if ketamine could affect male fertility or increase the chance of birth defects above the background risk. 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 for references.