



MotherToBaby

Medications & More During Pregnancy & Breastfeeding
Ask The Experts

Fact Sheet

by the **Organization of Teratology Information Specialists (OTIS)**

For more information about us or to find a service in your area,
call **(866) 626-6847**. Visit us online at **www.MotherToBaby.org**.

Find us! Facebook.com/MotherToBaby or @MotherToBaby on Twitter

Ketamine (Ketalar®)

This sheet talks 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/pdf/>.

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/pdf/> and <https://mothertobaby.org/fact-sheets/depression-pregnancy/pdf/>.

Ketamine has been misused as an illicit drug. Street names for illicit ketamine use include K, K-Hole, Super K and Special K.

Can ketamine make it harder for me to get pregnant?

Studies in women 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 misuse ketamine. Should I tell my healthcare provider?

Yes. If you have been taking ketamine regularly you should not stop suddenly (also called "cold turkey"); as this could cause you to go into withdrawal. Talk with your healthcare providers for advice on how to slowly stop taking ketamine. You can also contact the National Drug Helpline at <http://drughelpline.org/> or 1-888-633-3239.

Can exposure to ketamine increase the chance for miscarriage?

Miscarriage can occur in any pregnancy. It is not known if ketamine would increase the chance for miscarriage. A few studies suggest a small increase in the chance for a miscarriage in women who had surgery with general anesthesia in the first half of pregnancy. However, it is unclear if this is due to the anesthesia, or a response of the body to surgery, illness in the mother or another reason.

Does ketamine exposure increase the chance of having a baby with a birth defect?

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. It is not known if ketamine exposure would increase this background risk. Experimental animal studies have shown that ongoing or high dose exposure could affect the brain and liver in a developing baby.

Will ketamine exposure during pregnancy affect my baby's behavior or cause learning problems?

Experimental animal studies have reported that ketamine exposure can affect brain development, which might affect learning and behavior. Women 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 appropriate timing of surgery or procedures requiring general anesthesia.

Could ketamine cause other pregnancy complications?

When used as an anesthetic at the time of delivery, there may be changes in fetal heart rate or breathing

difficulties in the newborn. 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”) whose mother misused ketamine throughout the pregnancy. The baby’s hypotonia improved over the first month of life. There are no other reports on the misuse of long-term use of ketamine in human pregnancies.

Can I breastfeed my baby if I was given ketamine during labor and delivery?

Ketamine has not been well studied for use while breastfeeding. There are four case reports of infants who did not have side effects from breastfeeding after their mothers were given ketamine during labor. It is not known how much ketamine would get into breastmilk. Talk to your healthcare provider about all of your breastfeeding questions.

What if the baby’s father has been given ketamine?

Ketamine has not been well studied for use in men who are trying to get a partner pregnant. 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/>.

Please click here for references.

March, 2019