



MotherToBaby

Medications & More During Pregnancy & Breastfeeding
Ask The Experts

Fact Sheet

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

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Progesterone

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

What is progesterone?

Progesterone is a hormone that is naturally made in the body by the ovaries. The body uses progesterone to build the lining of the uterus during the menstrual cycle and helps the fertilized egg attach to the wall of the uterus. During pregnancy, the placenta also makes progesterone to help prevent miscarriage. Progesterone medication is sold under many brand names including Aygestin[®], Crinone[®], Endometrin[®], Prometrium[®], Prochieve[®], and Progestrona[®]. Some forms of progesterone are identical to the natural hormone and others are a little different. There are also man-made substances with similarities to progesterone called progestins. Progestins are included in some forms of birth control. This fact sheet does not discuss progestins when used for birth control. See our fact sheet on Depot medroxyprogesterone at <https://mothertobaby.org/fact-sheets/depot-medroxyprogesterone-depo-provera-pregnancy/>.

Does taking progesterone increase the chance for miscarriage?

Miscarriage can occur in any pregnancy. Progesterone use is not expected to increase the chance for a miscarriage. In fact, pregnant women might be prescribed progesterone early in pregnancy to help prevent miscarriage. Progesterone might be prescribed to help a woman become pregnant and in infertility treatment. It is important that you speak with your healthcare provider before beginning any treatment.

Will taking progesterone cause 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 unlikely that using progesterone or progestin will increase the chance of birth defects. Studies that have looked at the children of women who took progesterone during pregnancy found that the number of birth defects was no higher than expected when compared to children of women who did not take progesterone.

A few studies suggest that there is a higher chance of a baby boy being born with *hypospadias* after exposure to progestins. Hypospadias is when the opening where urine comes out is not at the correct location on the penis. Sometimes this can be treated with surgery.

Could progesterone use cause other pregnancy complications?

Studies that have followed children up to the age of 5 have not found progesterone use in pregnancy to be harmful.

Can I take progesterone while breast feeding?

Yes. Progesterone can enter breastmilk. Breastfeeding while taking progesterone is not expected to be harmful to the nursing infant. Be sure to talk to your healthcare provider about your breastfeeding questions.

My baby's father was taking progesterone when I became pregnant. Is there any risk to the baby?

There have been no studies looking at how a father's progesterone intake affects pregnancy. In general, fathers' exposures 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/>.

Selected References:

- Carmichael, SL, et.al. 2005. Maternal progesterone intake and risk of hypospadias. Archives of pediatrics & adolescent medicine, 159(10):957-962.
- Check JH, et al. 1986. The risk of fetal anomalies as a result of progesterone therapy during pregnancy. Fertil Steril. 45:575-7.
- Committee on Drugs. 2001. The transfer of drugs and other chemicals into human milk. Pediatrics, 108(3), 776-789.
- Committee on Practice Bulletins. 2012. Obstetrics, The American College of Obstetricians and Gynecologists. Practice bulletin no. 130: prediction and prevention of preterm birth. Obstet Gynecol. 120(4):964-73.
- Duds I, et al. 2006. Population-based case-control teratogenic study of hydroxyprogesterone treatment during pregnancy. Congenit Anom (Kyoto); 46:194-8.
- Fawzy M, et al. 2008. Treatment options and pregnancy outcome in women with idiopathic recurrent miscarriage: a randomized placebo-controlled study. Arch Gynecol Obstet. 278(1):33-38.
- Heinonen OP, et al. 1977. Birth Defects and Drugs in Pregnancy. Littleton, Mass.: John Wright-PSG, pp 389, 391-392, 394, 443, 478, 497.
- Heinonen OP, et al. 1977. Cardiovascular birth defects and antenatal exposure to female sex hormones. N Engl J Med. 296:67-60.
- Massai R, et al. 2005. Extended use of a progesterone-releasing vaginal ring in nursing women: a phase II clinical trial. Contraception.72:352-7.
- Michaelis J, et al. 1983. Prospective study of suspected associations between certain drugs administered during early pregnancy and congenital malformations. Teratology. 27:57-64.
- Norman JE, et al. 2009. Progesterone for the prevention of preterm birth in twin pregnancy (STOPPIT): a randomised, double-blind, placebo-controlled study and meta-analysis. Lancet. 373(9680):2034-2040.
- Practice Committee of the American Society for Reproductive Medicine. 2008. Progesterone supplementation during the luteal phase and in early pregnancy in the treatment of infertility: an educational bulletin. Fertility and Sterility. 89(4):789-92.
- Silver RI, et al. 1999. In vitro fertilization is associated with an increased risk of hypospadias. J Urology. 161(6):1954-1957.

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