

### What Is Medical Abortion?

## **Definition**

A medical abortion is one that is brought about by taking medications that will end a pregnancy. The alternative is surgical abortion, which ends a pregnancy by emptying the uterus (or womb) with special instruments. Either of two medications, mifepristone or methotrexate, can be used for medical abortion. Each of these medications is taken together with another medication, misoprostol, to induce an abortion.

#### When Is Medical Abortion Used?

Before any abortion can be done, a medical professional must confirm that a woman is indeed pregnant and determine how long she has been pregnant. The length of a pregnancy is usually measured by the number of days that have passed since the first day of the woman's last menstrual period (abbreviated as LMP). Medical abortions can be provided as early as a pregnancy can be confirmed. In fact, the shorter the time that a woman has been pregnant, the better the medications will work. Because they do not work as well later in the first trimester of pregnancy, medical abortion is not usually an option after nine weeks (or 63 days) LMP. After that, surgical abortion is the safest and best option.

# **How the Medications Work**

Mifepristone. Mifepristone (the abortion pill or RU-486) is a medication that was developed and tested specifically as an abortion-inducing agent. It was first licensed in France and China in 1988. Since then it has been used safely by millions of women worldwide. It was approved for use in the U.S. in September, 2000.

Mifepristone is taken in the form of a pill. It works by blocking the hormone progesterone, which is necessary to sustain pregnancy. Without this hormone, the lining of the uterus breaks down, the cervix (opening of the uterus or womb) softens, and bleeding begins.

Methotrexate. Methotrexate has been used in the U.S. since 1953, when it was approved by the FDA to treat certain types of cancer. Since that time, medical researchers have discovered other important uses for the drug. One of these uses is to end unintended pregnancies. Although the FDA did not consider methotrexate for this specific purpose, clinicians may prescribe methotrexate for early abortion.

Methotrexate is usually given to a pregnant woman in the form of an injection, or shot, although it also can be taken orally. It stops the ongoing implantation process that occurs during the first several weeks after conception.

Misoprostol. Within a few days after taking either mifepristone or methotrexate, a second drug, misoprostol, is taken. Misoprostol tablets (which may be placed either into the vagina, between cheek and gum, or swallowed) cause the uterus to contract and empty. This ends the pregnancy.

Mifepristone and methotrexate work in different ways, and so they will have slightly different effects on a woman's body. A clinician can help a woman decide whether medically induced abortion is the right option for her, and which of the two drugs she should use.

# How Long Do Medical Abortions Take?

It can take anywhere from about a day to 3-4 weeks from the time a woman takes the first medication until the medical abortion is completed. The length of time depends in part on which medications are taken and when the misoprostol is used. Complete abortion generally occurs sooner with mifepristone compared to methotrexate. The majority of women who take mifepristone will abort within four hours of using misoprostol. About 95% will have a complete abortion within a week. With methotrexate, 80-85% of women will abort within 2 weeks of taking the first medication. Some will take longer and may use additional doses of misoprostol.

## **During and After a Medical Abortion**

Some women will have vaginal bleeding after the first drug. This bleeding may be light, or it may be like a heavy period. After taking the misoprostol, cramping and bleeding usually begin within a few hours, although it may take longer. The cramping and bleeding may be more than with a normal menstrual period. Written and verbal guidelines are given to all women to help them know what to expect, and when to call the clinic for further evaluation.

Most women in the United States use the misoprostol and expel the embryo at home. A woman considering medical abortion will need to be prepared for this. The clinic staff will provide guidance and answer questions about what to expect and how to manage the side effects at home.

The most common side effects of medical abortion are caused by misoprostol. In addition to cramps and bleeding, early side effects may include: headache, nausea, vomiting, diarrhea, fever, chills, or fatigue. If a woman experiences flu-like symptoms or abdominal pain more than 24 hours after using misoprostol, she is advised to call the clinic.

Most women have cramps for several hours, and many pass blood clots as they are aborting. Some women may see the grayish gestational sac. However, the embryo will probably not be seen among the blood clots. At 49 days LMP, the size of the embryo will be about one-fifth of an inch. In an earlier pregnancy, it might be much smaller than that. Cramps and bleeding usually begin to ease after the embryonic tissue has been passed, but bleeding may last for one to two weeks after medical abortion.

Some women report that their first regular menstrual period after a medical abortion is heavier, or longer, or in some other way different from normal for them. By the second period after the abortion, their cycles should be back to normal.

### **Possible Complications**

About 95-98% of women will have a successful medical abortion. Complications are rare. However, a small percentage of women (approximately 0.5-2%) will need a suction aspiration (similar to a surgical abortion) because of heavy or prolonged bleeding. In about half of these cases, this heavy bleeding occurs 3-5 weeks after taking the medications. Rarely, in approximately 0.1-0.2% of cases, a blood transfusion might be required to treat very heavy bleeding. Some women also choose to have a suction aspiration because they would prefer not to wait for the medical abortion to be completed on its own.

In about 1% of cases or fewer, the medications do not work and the embryo continues to grow. In these cases, a suction procedure (surgical abortion) must be done to empty the uterus and complete the abortion. Deciding to continue the pregnancy to term is not an option after taking the first medication because the medications can cause birth defects in the pregnancy.

Seven deaths in North America have been reported in women following the use of mifepristone/misoprostol, out of more than 950,000 cases. One death was the result of an ectopic pregnancy (a pre-existing condition not related to mifepristone/misoprostol use), and six deaths have been attributed to sepsis. No causal relationship has been established between the medications and these rare fatalities.

There do not appear to be any long-term complications associated with use of these drugs.

### **Follow-Up Care**

Medical abortion requires a follow-up visit to the clinic or medical office. This return visit is very important to be sure that the abortion has been completed. In addition, a woman should contact her health care provider about any problems or concerns she has during the medical abortion.

## **Anti-Abortion Propaganda About Medical Abortion**

Anti-abortion activists claim that medical abortion is unsafe for women, even though there is no evidence to support this claim. The real goal of those activists is to stop all types of legal abortion - a situation which would put the lives and health of women in danger. When abortion was illegal in the United States (from the late 1800s until 1973), more pregnant women died from complications from self-induced abortions or abortions performed by untrained practitioners than from any other cause. Today, abortion is one of the most common and safest medical procedures. Because earlier abortions are the safest, medical abortion is an important medical advance for women, and an option that many choose.

#### References

Allen RH, Westhoff C, DeNonno L, Fielding SL, Schaff SA. Curettage after mifepristone-induced abortion: frequency, timing, and indications. *Obstet Gynecol* 2001;98:101-106.

Fischer M, Bhatnagar J, Guarner J, et al. Fatal toxic shock syndrome associated with Clostridium sordelli after medical abortion. *New Engl J Med* 2005; 353:2352-2360.

Grimes DA. Medical abortion in early pregnancy: A review of the evidence. *Obstet Gynecol* 1997;89:790-6.

Kahn JG, Becker BJ, MacIsaac L, et al. The efficacy of medical abortion: A meta-analysis. *Contraception* 2000; 61: 29-40.

Middleton T, Schaff E, Fielding S, et al. Randomized trial of mifepristone and buccal or vaginal misoprostol for abortion through 56 days of last menstrual period. *Contraception* 2005; 72: 328-332.

Paul M, Creinin MD (eds). Supplement on Early Medical Abortion. *Am J Obstet Gyn* 2000; 183: S1-S94.

Schaff EA, Eisinger SH, Stadalius LS, Franks P, Gore BZ, Poppema S. Low-dose mifepristone 200mg and vaginal misoprostol for abortion. *Contraception* 1999;59:1-6.

Schaff EA, Fielding SL, Eisenger SH, Stadalius LS, Fuller L. Lowdose mifepristone followed by vaginal misoprostol at 48 hours for abortion up to 63 days. *Contraception* 2000;61:41-46.

Schaff EA, Fielding SL, Westhoff C. Randomized trial of oral versus vaginal misoprostol at one day after mifepristone for early medical abortion. *Contraception* 2001; 64: 81-85.

Wiebe E, Dunn S, Guilbert E, Jacot F, Lugtig L. Comparison of abortions induced by methotrexate or mifepristone followed by misoprostol. *Obstet Gynecol* 2002; 99: 813-9.

## For More Information

For information or referrals to qualified abortion providers, call the National Abortion Federation's toll-free hotline: 1-800-772-9100. Weekdays: 8:00A.M.- 9:00P.M.

Saturdays: 9:00A.M.- 5:00P.M. Eastern time.

For more information on Medical Abortion see Medical Abortion: History and Overview at http://www.prochoice.org/education/resources/med\_history\_overview.html

National Abortion Federation 1660 L Street NW, Suite 450 Washington, DC 20036 202-667-5881 www.prochoice.org

Writers: Susan Dudley P

Writers: Susan Dudley, PhD and Stephanie Mueller Copyright© 2008, National Abortion Federation Revised September 2008.