Emergency Contraceptives and Other Reproductive Terms

Background

SART members should be knowledgeable of emergency contraception and other reproductive health terms. The terms provided in this document are based on standard medical definitions.

Emergency Contraception

Methods of Emergency Contraception

- Yuzpe Method
- Plan B

Established Emergency Contraceptive Services

Other Reproductive Health Terms

- Abortion
- Combined Oral Contraceptive
- Ectopic Pregnancy
- Embryo
- Estrogen
- Miscarriage
- Ovum
- Pregnancy
- Progesterone
- Progestin
- Progestin-only Pills

Emergency Contraception

Emergency Contraceptive Pills (ECPs): Taking ECP, often referred to as the "Morning After Pills" can prevent pregnancy up to 72 hours after contraceptive failure or unprotected sexual intercourse. One product contains the hormones progestin and estrogen (known as combined oral contraceptive); the other contains just progestin (known as progestin-only pills). Both amount to taking a high dose of "regular" oral contraceptives very shortly after unprotected sexual intercourse.

Emergency contraception has been an option for women since the U.S., Food and Drug Administration (FDA) approved birth control pills in 1960. This is possible and legal, because once the FDA approves a product, it may be prescribed (but not marketed) for uses that are not specifically included in the approved labeling. In February 1997, after confirming the specific doses of combined oral contraceptives that are safe and effective form of emergency contraception, the FDA specifically approved ECPs for use and marketing in the U.S. In July 1999, progestin-only dosages were also approved for use.

Whether oral contraceptive pills are taken on a daily basis as an ongoing method of pregnancy prevention or in a concentrated dose in an "emergency" situation, their potential modes of action remain the same. The best scientific evidence suggests that ECPs, like oral contraceptives, work by suppressing ovulation. But depending on the timing of unprotected intercourse in relation to the woman's hormonal cycle, ECPs — as in cases with all hormonal contraceptive methods — also may prevent pregnancy either by preventing fertilization or by preventing implantation of a fertilized egg in the uterus. ECPs cannot disrupt an established pregnancy, and are therefore not considered abortifacients, according to the FDA.

Emergency contraceptives generally reduce the rate of pregnancy by 75 percent, which means the number of women who would be expected to become pregnant after unprotected intercourse drops from eight without ECPs to two when they are used. However, progestin-pills have been found to have a higher effectiveness, reducing the risk of pregnancy by 89 percent and 95 percent if taken within 24 hours of unprotected intercourse or rape.

Side effects include nausea and vomiting, both of which were reported less frequently in women taking the progestin-only pills.

Methods of Emergency Contraceptive Pills

Yuzpe Method: This is the best-studied method of post-coital contraception. Professor Albert Yuzpe of Canada first described it in 1974. Exact treatments vary widely internationally. A typical treatment used in North America and Europe consists of two tablets, each tablet containing ethinyl estradiol and norgestrel or levonorgestrel, taken within 72 hours of unprotected sexual intercourse. A second identical dose is to be taken 12 hours after the first dose. When used in this manner, the treatment is 75 percent effective in preventing pregnancy.

Plan B: An ECP "kit" marketed under the trade name of Plan B by Women's Capital Corporation. Plan B are progestin-only birth control pills (i.e., levonorgestrel). The FDA approved it for the use of emergency contraceptives in July 1999. Each kit contains two tablets, each containing levonorgestrel. The first tablet should be taken as soon as possible within 72 hours. The second tablet must be taken 12 hours later.

In two random studies, the incidence of nausea and vomiting was reduced for women who took progestin-only pills vs. the combination estrogen/progestin pills. Plan B provides an option to those women whom cannot take estrogen. In addition, this method was found to have a higher effectiveness rate than combination pills, reducing the risk of pregnancy by 89 percent to 95 percent if taken within 24 hours of unprotected intercourse or sexual assault.

Established Emergency Contraceptive Services

Additional information and materials that may be of help in establishing emergency contraceptive services are available from the following sources:

- Copy of the FDA Federal Register notice regarding emergency contraception: request document number 0265 at 1-800-342-2722.
- Listing of available emergency contraceptives by country. List contains only the oral contraceptives containing hormones that have been studied for use for emergency contraception in clinical trials. http://ec.princeton.edu/worldwide/default.asp

- Copy of the Association for Reproductive Health Professional's Emergency Contraception Protocol. http://www.arhp.org/healthcareproviders/visitingfacultyprograms/index.cfm?ID=248

Other Reproductive Health Terms

Abortion: The expulsion or extraction of the products of conception from the uterus before the embryo or fetus is capable of independent life. Abortions may be spontaneous or induced. Spontaneous abortions are commonly called miscarriages. Induced abortions are voluntary interruptions of pregnancy through medical or surgical methods.

Types of Abortion

Surgical Abortion: The interruption of pregnancy through one of various surgical methods, usually at least six weeks from the woman's last menstrual period. There are three types of surgical abortion: manual vacuum aspiration (MVA), dilation and suction curettage (D&C) or vacuum aspiration and dilation and evacuation (D&E). Surgical abortion is generally 99 percent effective in terminating pregnancy.

Medical Abortion: The interruption of pregnancy through the use of medications, without surgical intervention. The methods include the Methotrexate/Misoprostol regimen and RU-486 (Mifepristone/Misoprostol regimen) and are only used very early in pregnancy, i.e., prior to 49 days from the first day of the last menstrual period. These methods differ from emergency contraception in that they interrupt and terminate a pregnancy, rather than prevent one, as ECPs do. Please see below for further explanation of these methods.

Methotrexate/Misoprostol Regimen: Methotrexate blocks folic acid and prevents cell division; while it is already marketed as a cancer-fighting and arthritis drug, its use as an abortifacient is legal but technically "off label." Misoprostol, an already marketed prostaglandin, causes uterine contractions. These medications, used in combination, cause the development of the pregnancy to cease, and the uterus to expel the products of conception. It is used from the detection of pregnancy up to 49 days from the woman's last menstrual period (i.e., seven weeks pregnant) and therefore is a method to be used only very early in the pregnancy. This method requires several visits to a physician and is 92 – 96 percent effective in terminating pregnancy.

RU-486 (Mifepristone/Misprostol Regimen): Mifepristone blocks the hormone progestrone, that is needed to maintain a pregnancy. Misoprostol, an already marketed protaglandin, causes uterine contractions. These medications, used in combination, cause the development of the pregnancy to cease, and the uterus to expel the products of conception. The combined regimen is 96 percent effective in terminating pregnancy. It can be used as soon as pregnancy is detected but only up to 49 days from a woman's last menstrual period (i.e. seven weeks pregnant).

On September 28, 2000, the FDA approved the abortion drug Mifepristone to be marketed in the U.S. as an alternative to surgical abortion. The initial rollout of the drug, under the trade name Mifeprex, began in November 2000.

Mifepristone is not available to women directly in pharmacies by prescription; instead, it is being made available to physicians. The FDA's terms of approval require that a woman make three visits to a physician, first to receive the mifepristone, then two days later for a dose of misoprostol and once again, on day 14, for followup.

Combined Oral Contraceptive Pill (OC): It is one of the most extensively studied medication ever prescribed. Since its approval by the FDA in 1960, the pill has played an important role in contraception. Combined OCs prevent pregnancy primarily by suppressing ovulation through the combined actions of estrogen and progestin.

Ectopic Pregnancy: An ectopic pregnancy occurs when the embryo implants outside the uterus, usually in the fallopian tubes.

Embryo: The developing conceptus through the first seven to eight weeks of gestation, after which it is called a fetus.

Estrogen: The primary female hormones; any natural or artificial substance that induces estrogenic activity, more specifically, the hormones estradiol and estrone produced by the ovary. Estrogens are produced chiefly by the ovary but also by the adrenal cortex and the testes.

Fertilization: Fertilization is the process of combining the male gamete, or "sperm," with the female gamete, or "ovum." The product of this combination is a cell called a zygote.

Miscarriage: Spontaneous abortion before the fetus is viable.

Ovum: The egg cell; a female gamete; an oocyte; a female reproductive cell at any stage before fertilization.

Pregnancy: According to the medical definition, pregnancy occurs when a fertilized egg successfully implants in the lining of the uterus. This process begins about a week after fertilization and is complete about two weeks after fertilization.

Progesterone: A steroid hormone produced by the corpus luteum, adrenals or placenta. It is responsible for changes in the uterine endometrium in the second half of the menstrual cycle which are preparatory for implantation of the fertilized ovum, development of maternal placenta after implantation and development of the mammary glands.

Progestin: A large group of synthetic drugs that have a progesterone-like effect on the uterus.

Progestin-Only Pills: The marketing of progestin-only pills (sometimes referred to as minipills) began about 10 years after combined OCs were introduced. Progestin-only pills may prevent pregnancy via several mechanisms: inhibition of ovulation, thickening and decreasing the amount of cervical mucus, creation of a thin atrophic endometrium and premature luteolysis.

Progestin-only pills offer an option to women who cannot take estrogen. Additionally, women who are breastfeeding, progestin-only pills do not have an adverse effect of lactation.

Place label here that includes Hospital Name, Address, Telephone and Emergency Department Contact

This form should be given to the Survivor prior to signing medical/treatment Consent

Emergency contraceptive fact sheet sample

What is Emergency Contraception?
Sometimes called the "morning after pill," emergency contraception is used to prevent pregnancy immediately after unprotected sex.

What is unprotected sex?

- Sex without using birth control.
- The condom breaks or comes off.
- The diaphragm slips out of place.
- Rape or sexual assault.
- You stopped taking the birth control pills for more than a week or missed almost half of the birth control pills in the past two weeks.

Depending on when in your menstrual cycle you had unprotected sex, you could have 1 in 3 chance of becoming pregnant. Emergency contraception can reduce your risk by 75 percent.

When do you use Emergency Contraception?
It is most effective when started within 24 hours of unprotected sex but no later than 72 hours.

Is it safe?
Twenty years of study by the FDA says Emergency Contraception is safe and effective, but it isn't for everyone. Patients at _____ are screened to see if Emergency Contraception is safe for them.
Name of Hospital/Facility

How can I get Emergency Contraception?
After your sexual assault exam, you will be asked several questions to see if Emergency Contraception is right for you. You will take the first dose at the hospital. The second dose should be swallowed 12 hours later.

Are there any side effects?
You may feel nausea and have vomiting, but these symptoms go away a day or two after treatment. If you vomit within one or two hours after taking a dose call your physician, you may need to repeat a dose.

When will I have my period?
Your next period may start a few days earlier or later than usual. If you period has not started within three weeks, call your health care provider. Emergency contraceptives may not prevent an ectopic pregnancy (tubal pregnancy — the fertilized egg implants outside the uterus).

How soon can I get pregnant after taking emergency contraception?
You can get pregnant if you have unprotected sex immediately after taking the treatment. Until you know your HIV status you should use protective measures such as not having sexual intercourse or using a male or female condom.