New Contraceptives and Other Advances in Reproductive Health

Educator Resource

Emergency Contraception

Plan B and Preven are two emergency contraceptive pill products (also called "dedicated products") currently available to women with a doctor's prescription. While the ingredients in these products differ, both Plan B and Preven should be taken within 72 hours of unprotected intercourse. The sooner that emergency contraception is started, the more effectively it prevents pregnancy. While both products are considered safe and will not harm a developing fetus, neither product should be used as a routine form of birth control, since other forms of contraception are more effective and can provide protection from sexually transmitted infections (STIs).

Preven, which appeared on the market in 1997, is a kit containing four pills (which combine estrogen and progestin) and a pregnancy test. Users may experience some side effects when using this contraceptive, including nausea and vomiting. Plan B, more recently approved by the FDA, is a package with only two pills which contain progestin only. Plan B is more effective and may cause fewer side effects for users than Preven since it does not contain estrogen.

Information on the emergency contraceptive pill products can be found at:

http://www.plannedparenthood.org/ec/

http://gynpages.com/ACOL/category/mat.html

http://www.cais.com/agm/main/news/fdadoc.htm

http://www.path.org/cec

Or call the toll free number: 888-Not-2-Late

The Female Condom

A safe, effective barrier method for preventing pregnancy and STIs, including HIV/AIDS. It is a lubricated polyurethane sheath shaped like the male condom, but has flexible rings at each end. The closed end is inserted into the vagina, while the open end remains outside, partially covering the woman's labia. Like the male condom, the female condom is available without a prescription and is intended for one-time use. Although it takes more practice to use than the male condom, the female condom provides women with more control in protecting themselves.

Information on the female condom can be found at:

http://www.femalecondom.org

http://www.femalehealth.com

http://safersex.org/condoms/femalecondoms/

http://www.avert.org/femcond.htm

http://www.emory.edu/WHSC/MED/FAMPLAN/reality.html

http://www.psi.org/psi_ops/pfs/50_fcon.htm

Or call the Female Health Company at: 845-353-8298 (this is not a toll free number)

Lunelle

A contraceptive injection which was approved by the FDA in late 2000. It differs in several ways from Depo Provera, the other injected birth control option which has been available for many years. Lunelle is injected more often, once a month, compared to Depo Provera, injected once every three months. Lunelle contains both estrogen and progestin whereas Depo Provera contains only synthetic progesterone. The added estrogen in Lunelle mimics a more natural hormonal mix, so Lunelle usually helps to maintain regular menstrual periods, while Depo Provera can cause very irregular cycles, or no bleeding at all. Finally, women who use Lunelle return to fertility relatively quickly, usually within two to four months; Depo Provera can take from six months to two years. As with contraceptives taken orally, Lunelle can cause side effects such as breast tenderness, acne, weight gain or loss, and/or mood swings. Also, like all hormonal contraceptives — both oral and injected — Lunelle will not protect against STIs.

Information on Lunelle can be found at:

http://www.pharmacia.com/

http://www.jademagazine.com/10iss lunelle.html

Or call Pharmacia UpJohn's toll free number: 800-253-8600

Male Contraception (pills, shots, and implants)

Male contraception is collecting worldwide support according to recent studies. Last year's European journal Human Reproduction showed that 80% of women favored male contraception, and 66% of men said they would use a pill. (Source: Popline, March-April 2000 as reported in the Religious Consultation Report, Nov. 2000, Volume 4 No. 2.) Unfortunately, despite the need and public interest, options for male contraception are still limited to the traditional methods of condoms, vasectomy, withdrawal and abstinence. While several innovations are being studied, it may take another 5-10 more years before new options become widely available.

Researchers are studying a variety of approaches. Scientists in England and Scotland have found a combination of synthetic hormones that stop sperm production without affecting a man's sex drive. A small pellet of testosterone is implanted into the man's abdomen every 12 weeks. This approach keeps libido active and also avoids unpopular testosterone shots. However, this implant must be combined with a daily progesterone pill. The pill is taken to stop sperm production, which occurs in two to three months. Additional studies are being conducted in which both hormones may be implanted in the body, which would eliminate the need for a daily pill.

Scientists in the U.S. are looking into male contraceptives that do not rely on hormones. Some are studying ways to block the chemicals which enable sperm to reach the egg. Still other scientists are developing compounds that prevent the sperm cells from maturing without affecting their production. However, neither of these approaches have been tested on human subjects yet.

Information on advances in male contraception can be found at:

http://www.healthsurfing.com/health/2000/04/04/

http://www.rti.org/news/bc male new.cfm

Medical Abortion

A term that describes the use of a combination of drugs, or abortifacients, to terminate a pregnancy. Medical abortion differs from surgical abortion (such as vacuum aspiration, or dilation and evacuation), and from spontaneous abortion, also known as a miscarriage. The most common drugs currently used for medical abortion are listed below:

Mifepristone (RU-486) was developed by the French in 1980. It blocks the action of progesterone, a hormone necessary to sustain an early pregnancy, and increases the uterus' sensitivity to prostaglandins, which cause uterine contractions.

Methotrexate is currently marketed in the U.S. (since 1954) for treatment of certain cancers and arthritis, and to terminate ectopic pregnancy (where the fetus develops outside the uterine cavity). It keeps the embryo from developing and implanting in the uterine wall.

Misoprostol has been used in the U.S. to prevent gastrointestinal ulcers since 1988. It can also be used to cause uterine contractions, which can expel a fertilized egg from the uterus. This is currently used in combination with mifepristone when used for medical abortion.

The combination of mifepristone and misoprostol has been found effective in terminating early pregnancies (up to about 65 days). Medical abortion can be performed earlier in the pregnancy than surgical abortion and is also less invasive. Potential drawbacks include at least two office visits, potential prolonged bleeding, and a slightly higher failure rate than surgical abortion, which can require follow-up by a surgical method. The approval of these drugs for use as abortifacients provides more options for women wanting an early termination of pregnancy and may increase the number of physicians who provide early abortion services.

Information on medical abortion can be found at:

http://jamwa.amwa-doc.org/vol55/55 3 ed.htm

http://www.plannedparenthood.org/library/facts/medabort fact.html

Or call the National Abortion Federation's toll free number: 800-772-9100

Premenstrual Dysphoric Disorder (PMDD)

A severe form of premenstrual syndrome (PMS). Both PMDD and PMS occur the week before the onset of menstruation and can last the length of menstruation. PMDD and PMS share many of the same symptoms, including breast tenderness, bloating, irritability and mood swings. However, PMDD has much more severe emotional symptoms, including severe mood swings, depressed mood, feelings of hopelessness, anxiety, sleep disturbances, difficulty concentrating, and angry outbursts. PMDD interferes with a woman's everyday life and can greatly affect her relationships with family and friends. Since symptoms of PMDD may impair social functioning, and in extreme cases, lead women to become suicidal or homicidal, it has recently received an official psychiatric diagnosis.

Premenstrual Dysphoric Disorder (continued)

Managing overall health through lifestyle choices can reduce symptoms of PMS and PMDD in many women. The following healthy practices are therefore recommended:

- Eat regular meals and a balanced diet low in meat, sugar and salt.
- Stop smoking and reduce or eliminate alcohol and coffee consumption.
- Reduce stress by adjusting expectations or employing stress reduction activities.
- Get plenty of sleep.
- Get aerobic exercise three or four times a week.

Medical treatments are also available for women with PMS or PMDD. PMS is generally treated with birth control pills and other medicines to address the symptoms of breast tenderness, bloating and weight gain, menstrual pain and cramping. PMDD, however, can also be treated with anti-depressants, including selective serotonin reuptake inhibitors (SSRIs) such as Prozac, Effexor or Zoloft. Additionally, a new medication called "Sarafem" is also available with a doctor's prescription. Sarafem helps correct the imbalance of serotonin that many doctors feel contributes to PMDD.

Information on PMDD can be found at:

http://www.sarafem.com/about.html

http://www.drdonnica.com/display.asp?article=10086

Or call Eli Lilly and Company's toll free number: 800-545-5979

ThinPrep Test

Human Papilloma Virus (HPV) Testing is an advance which shows promise of decreasing the number of women who develop cervical cancer. HPV, the virus associated with abnormal cervical tissue changes and cervical cancer, infects more than five million people a year, making it the most common STI in the U.S. Some researchers have found HPV prevalence for women under age 25 to be somewhere between 28% and 46%.

Conventional testing for abnormal or precancerous cells in the cervix (most likely caused by HPV) is the Pap Smear. Now there is a new test called ThinPrep (which is more effective than the conventional Pap Test in detecting abnormal and precancerous cells. This new testing process enables health care providers in the timely removal of these cervical cells before they can progress to the cancerous stage.

Further information about HPV testing and vaccines can be found in the following sources:

http://www.ashastd.org/stdfaqs/statistics.html

 $http://www.abcnews.go.com/sections/science/DailyNews/cervical_vaccine 980617.html$

Or call the Herpes and HPV hotline toll free number: 800-230-6039