'Morning After Pill' Works up to 5 Days After Sex

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(PhysOrg.com) -- A team of researchers from the United States and Europe has published new evidence supporting the use of ulipristal acetate as an effective alternative to levonorgestrel (marketed as Plan B®) for emergency contraception. This study was published online Jan. 29, 2010, and also appears in the Feb. 13 print edition of *The Lancet*.

Emergency contraception, sometimes referred to as the "morning-after" pill, is birth control that can prevent pregnancy after unprotected intercourse. The most widely used emergency contraceptive drug is levonorgestrel, which is approved for use within 72 hours of sexual intercourse and is thought to work by interfering with ovulation, the release of eggs from the ovaries.

"Levonorgestrel is most effective at inhibiting ovulation early in the menstrual cycle, when the risk of pregnancy is low," says Jennifer Van Horn, M.D., University of Utah assistant professor of obstetrics and gynecology, Women's Health Clinic director, and an author on the study. "Later in the cycle, when the risk of pregnancy is more than 80 percent, levonorgestrel only inhibits ovulation 12 percent of the time. Ulipristal acetate, on the other hand, prevents ovulation in 60 percent of cycles, potentially preventing pregnancy in more women than levonorgestrel."

Van Horn and her colleagues in the United States, Scotland, and France, studied more than 2,200 U.S. and European women with regular menstrual cycles who presented to family planning clinics requesting emergency contraception within five days of unprotected intercourse.

Study participants were randomly assigned to receive either a single dose of levonorgestrel or a single dose of ulipristal acetate by mouth. Among the 1,700 women who received emergency contraception within 72 hours of intercourse, there were 37 pregnancies - 15 in the ulipristal acetate group and 22 in the levonorgestrel group. In 203 women who received emergency contraception between 72 hours and 120 hours after intercourse, there were three pregnancies, all among women in the levonorgestrel group.

"Our study confirms the results of an earlier trial in which ulipristal acetate was at least as effective as levonorgestrel in preventing pregnancy when taken up to 72 hours after sexual intercourse," says Van Horn. "It also provides additional evidence that ulipristal acetate is an effective alternative to emergency contraception that can be used to up five days after unprotected intercourse."

The researchers also performed an analysis combining the data from their trial and an earlier head-to-head comparison of ulipristal acetate with levonorgestrel. They found that the rate of pregnancy was lower among women who were given ulipristal acetate than those who were given levonorgestrel, regardless of whether the emergency contraception was taken within 24 hours, 72 hours, or 120 hours after sexual intercourse. In fact, ulipristal acetate nearly halved the risk of becoming pregnant compared with levonorgestrel when given within 120 hours after intercourse.

"A third of the participants in our study presented for emergency contraception within 24 hours of unprotected sexual intercourse," says Van Horn. "In our analysis, the risk of pregnancy was reduced by almost two-thirds with ulipristal acetate compared with levonorgestrel when it was used within 24 hours."

Ulipristal acetate was approved by the European Medicine Agency in

May 2009 as a safe and effective method of emergency contraception for use up to five days after unprotected sexual intercourse. In this study, Van Horn and her colleagues found that ulipristal acetate seemed to be as well-tolerated as levonorgestrel and was associated with no greater risk of adverse events or disturbances to the menstrual cycle.

"Although emergency contraception is available in more than 140 countries, and is even available without a doctor's prescription in nearly 50 countries, it is still underused," says Van Horn. "Emergency contraception can prevent unintended pregnancies, and our study shows that ulipristal acetate provides women and healthcare providers with another choice for pregnancy prevention, especially among women who present late for emergency contraception."

The study was led by Anna F. Glasier, M.D., and Sharon T. Cameron, M.D., of the University of Edinburgh and the United Kingdom's National Health Service. Researchers in Ohio, Maryland, Florida, and Texas also contributed to the study. Erin Gainer, Ph.D., of HRA Pharma was senior author on the study. HRA Pharma, the Paris pharmaceutical company that makes ulipristal acetate, funded the study.

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