# **Contraceptive Ring Beats Patch in Trial**

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### BY NANCY WALSH New York Bureau

MINNEAPOLIS — Women who are content with combined oral contraceptives but are willing to try a nondaily method of birth control are more likely to be satisfied with the contraceptive ring than the patch, Dr. Mitchell D. Creinin said at the annual meeting of the Association of Reproductive Health Professionals.

This was the conclusion of a multicenter, open-label trial that enrolled 500 oral contraceptive users between June 2005 and September

2006. randomizing them to three menstrual cycles of either the ring or the patch.

The ring and the patch were introduced in the United States in 2002, but there has not been a trial comparing the two directly and there is no objective information on how to advise women who might be interested in switching from the pill to one of these newer

methods, Dr. Creinin said.

In previous randomized trials, women found the ring and the patch superior or equal to the pill in terms of acceptability, but those trials typically randomized women to a pill or a new, otherwise unavailable method, he said.

To be eligible for the new study, women had to be satisfied current or recent users of the pill. A total of 84% were current users, and the remaining 16% had discontinued within the previous 3 months for reasons other than dissatisfaction with the oral contraceptive.

The primary outcome measure was continuation rates after three cycles of the ring or patch, and the secondary outcome measure was intended use beyond the three cycles. The trial also compared side effects, adherence and retention problems, and overall acceptability, said Dr. Creinin, director of the division of gynecologic specialties, University of Pittsburgh. No daily diaries were used to record side effects or other daily concerns. "We felt that asking them to do something daily might have an impact on how they perceived the method," he said.

During the trial, the Food and Drug Administration issued a warning about increased estrogen exposure with the patch. This information was given to all subjects who were enrolled then, and it was incorporated into the informed consent form for all subsequent enrollees

A total of 479 women were eval-

products, 6 withdrew consent during the study, and 12 were lost to follow-up. Among the 241 women randomized to the ring, the mean age was 26; among the 238 randomized to the patch, the mean age was 25. Mean body mass index was 23  $kg/m^2$  in both groups, and 8% of both groups were smokers.

uated; 3 never started using the

The primary outcome measure of continuation through three cycles was achieved by 95% and 88% of the ring and patch users, respectively. Moreover, when asked if they planned to continue with the nondaily method, 71% of the ring

users said they would, compared with only 27% of the patch users, Dr. Creinin said. Patch users also

reported significantly more systemic side effects than ring users. Women using the patch were more likely to complain of longer and more painful menstrual cycles. A total of 38% of patch

users had longer periods, compared with 9% of ring users, while 29% of patch users reported dysmenorrhea, compared with 16% of ring users.

Nausea was reported by 8% and 1% of the patch users and the ring users, respectively.

Approximately half of the women had the patch fall off or took it off at some point during the three cycles, while about 40% of ring users had it fall out or took it out at some point. This was significantly more patch detachment and ring expulsion than has been reported in the literature.

'I think it's important to convey this to your patients, to let them know that these nondaily methods do require some daily attention to ensure the products are still there," he said.

"As far as overall acceptability, the bottom line was that women found the ring much more acceptable than the patch," Dr. Creinin said. They also were more likely to recommend it to their friends.

Dr. Creinin disclosed that the study was funded by Organon. "However," he said, "it was an investigator-initiated grant, meaning I wrote the proposal, wrote the protocol, picked the sites, supervised the sites, did the monitoring, did the data collection, and analyzed the data, with no requirements for approval from Organon."

He also disclosed that he does consulting for Organon and receives research funding from Bayer and Organon.

## **Prior GDM? Treat Without Screening**

#### BY MIRIAM E. TUCKER Senior Writer

AMSTERDAM — Seeing and presumptively treating all women with previous gestational diabetes mellitus for GDM early in their subsequent pregnancies-without rescreening them-is likely to improve maternal and fetal outcomes, Dr. Christina S. Cotzias said at the annual meeting of the European Association for the Study of Diabetes.

Recurrence rates of GDM in subsequent pregnancies among women who had the condition in a previous pregnancy range from about 30% to 70%, depending on the population studied. In general, the heavier and less white the population, the greater the GDM recurrence rate. And among women who do have GDM recurrence, some studies have suggested that glucose intolerance may occur earlier in subsequent pregnancies than in the initial one, said Dr. Cotzias of the department of obstetrics and gynecology at West Middlesex University Hospital, Isleworth, England.

The Middlesex hospital's obstetric unit serves a multiethnic community with a large Asian population. A retrospective case note analysis was performed for 419 women who were treated for GDM at the hospital during 2000-2005, of whom 123 (29%) had GDM in a prior pregnancy and 296 (71%) did not. Those with previous GDM were significantly older (median age 34 vs. 32 years), and heavier (BMI 29 vs. 27 kg/m<sup>2</sup>), but there were no differences in ethnicity between the groups, both of which were approximately one-half Asian, one-quarter white, and about one-fifth black: the remainder were other ethnicities.

Hemoglobin A<sub>1c</sub> levels were significantly higher among the women with previous GDM: 27% were at or above 7%, compared with 15% among those with newly diagnosed GDM. The women with previous GDM were much more likely to require insulin therapy (67% vs. 47%) and to be started on insulin sooner (25 vs. 34 weeks' gestation).

Of the 82 women in the previous GDM group who required insulin, nearly twothirds (48, or 59%) needed it prior to 28 weeks' gestation, the time of routine GDM screening. "If we waited to screen those women, we would miss nearly 60% of those who need insulin before 28 weeks," Dr. Cotzias noted.

Exactly half of each group had spontaneous vaginal delivery; cesarean section rates also did not differ significantly in the two groups (44% of those with previous GDM and 40% of those without). There were no significant differences between the two groups in any neonatal outcome, including shoulder dystocia, stillbirth, neonatal abnormality, or birth weight.

Of the women who came back for follow up after delivery, 23% of 66 with previous GDM and 22% of the 188 without-an insignificant difference-had abnormal glucose tolerance test results.

"I extrapolate the findings to suggest that if I left these women until 28 weeks' gestation and then started [treatment], I would have missed the boat and had worse outcomes. I can't prove it, but that's what the data suggest," Dr. Cotzias said.

### -Drugs, Pregnancy, and-LACTATION **Pregnancy Registries**

vaccines they are the primary source of hu-

man pregnancy experience. The strengths of these registries are their prospective nature-women are enrolled before the outcome is known-and enrollment is over a wide geographical area. Typically, two types of pregnancy outcomes are obtained: outcomes with birth defects and outcomes without known birth defects. The latter comprises live births, fetal deaths, and spontaneous abortions.

Registries can identify early signals of teratogenicity, but they have several limitations. They depend on voluntary reporting, which results in selection bias, and they are not representative of target populations. Pregnancies that are lost to follow-up may have had different outcomes than those with documented outcomes. Furthermore, registries lack details on elective terminations and fetal deaths without birth defects, and all spontaneous abortions. Finally, with some exceptions, they usually lack control groups.

Because the total number of exposed pregnancies is unknown, data from a registry cannot be used to calculate prevalence of an outcome, but the data can be used to estimate



Pregnancy registries are valuable sources of the proportion of birth defects. Some reginformation, and for many drugs and istries also collect data on retrospective reports, which are less representative of the tar-

get population because they can be biased toward the reporting of more unusual and severe outcomes. However, they may be helpful in detecting unusual patterns of birth defects.

A complete list of pregnancy registries is available on the Food and Drug Administration Web site, which provides additional details on the registries, such as fax numbers, links to other Web sites, and mailing addresses (www.fda. gov/womens/registries).

Because the strength of a registry is based on numbers, I encourage health care professionals to enroll appropriate patients in these registries whenever possible.

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