Effects of OCs May Persist After Rx Discontinuation

BY MIRIAM E. TUCKER
Senior Writer

WASHINGTON — The hypoandrogenic effects of oral contraceptives may not be completely reversible after discontinuation of their use, Claudia Panzer, M.D., reported at the annual meeting of the American Association of Clinical Endocrinologists.

OCs are known to decrease serum testosterone levels by decreasing ovarian production of testosterone and increasing production of sex hormone–binding globulin (SHBG) by the liver. Higher SHBG levels lower the amount of free testosterone that reaches the tissues. Such changes have been associated with decreases in sexual interest, arousal, vaginal lubrication, and frequency of sexual intercourse.

It has long been assumed that these changes are reversible after discontinuation of OC use, but findings from a retrospective review of 124 premenopausal women with female sexual dysfunction suggest otherwise, said Dr. Panzer, an endocrinologist at Boston University.

Among the subjects were 62 current OC users, 39 former users, and 23 who had never used OCs. None of the subjects had used OCs for reasons other than birth control. The "never users" were older than the current users (36 vs. 32 years), and had a longer duration of sexual dysfunction than current and former OC users (9 years vs. 6 years in both OC groups).

Those who had never used OCs also scored higher on the Female Sexual Function Index, indicating better function (21 points, vs. 15 points for the current OC users and 10 points for the former users). Women on OCs had lower scores in the domain of sexual desire, compared with those who had never used them, and also complained more about sexual pain.

Of the 101 users, 39 said the knowledge that the pill might cause sexual dysfunction would convince them to stop taking it.

Baseline SHBG levels were four times higher in the current OC users (157 nmol/L) and the former users (161 nmol/L) than in the never-users (41 nmol/L). Although SHBG levels did decrease after discontinuation of OC use, they remained elevated after 49-120 days (62 nmol/L) and again at more than 120 days (63 nmol/L), compared with the never-users, for whom SHBG measured after 120 days was 35 nmol/L, she said.

The fact that the SHBG value after 120 days in the group that had discontinued OCs had fallen into the normal reference range despite being twice as high as for the never-users suggests that the currently used SHBG reference range may be too wide. A narrower range might better reflect hormonal changes seen in women who use OCs, Dr. Panzer commented.

Testosterone levels at baseline did not differ between the three groups, but the never-users had higher free androgen indexes than did the current and former OC users (3.7 vs. 0.8 for both OC groups), calculated free testosterone levels (6.2 pg/mL vs. 2 pg/mL for both OC groups), and calculated bioavailable testosterone (146.5 pg/mL vs. 47.8 pg/mL for former users and 46.7 pg/mL for current users).

These data suggest that total testosterone is a poor test to evaluate androgen status in OC users and that assessments of free or bioavailable testosterone are superior, Dr. Panzer said. ■

Low Expulsion Rate for NuvaRing Contraceptive

SAN FRANCISCO — In a year's experience with the NuvaRing contraceptive, 2.3% of women experience an expulsion, according to the results of four large, phase III clinical trials, Marc Kaptein, M.D., and Edio Zampaglione, M.D., said in a poster presentation at the annual meeting of the American College of Obstetricians and Gynecologists.

In a retrospective analysis of 3,333 women and 33,462 cycles, expulsion occurred in 0.5% of cycles, said the researchers from Organon International, which makes NuvaRing.

The proportion of cycles with expulsions decreased with time, likely due to experience. In the first three cycles, 1.7% reported an expulsion. Users were followed for 13 cycles. In the 11th, 12th, and 13th cycles, 0.2% experienced expulsions.

—Robert Finn