

# Extended-Cycle OCs May Cut Heavy Bleeding Days

BY BETSY BATES  
Los Angeles Bureau

RENO, NEV. — Patients taking extended-cycle oral contraceptives experienced about the same number of total bleeding days over 6 months as women taking a standard, 28-day oral contraception regimen, but they had significantly fewer days of moderate to heavy bleeding, a new study indicates.

"There is lower serum and urinary estrogen, [as well as] smaller ovaries and follicles, thinner endometrium, and improved patient symptomatology with a continuous oral contraceptive pill regimen," Dr. Richard S. Legro reported at the annual meeting of the Society for Gynecologic Investigation.

The findings support the use of extended cycle suppression with oral estrogen (20 mcg) and progestin norethindrone acetate (1 mg) in a continuous regimen for indications such as endometriosis, hirsutism, and acne, Dr. Legro said at the meeting, where he presented the findings in poster form.

No pharmaceutical companies contributed funding for the study, which was financed in part by the National Institutes of Health, said Dr. Legro, a reproductive endocri-

nologist at Pennsylvania State University in Hershey, Pa.

Dr. Legro and his coinvestigators enrolled 62 normally cycling women in a double-blind, randomized controlled trial and followed them for symptoms, bleeding patterns, endometrial histology, follicular development, and serum and urinary levels of sex steroids. The women either took the standard regimen of oral contraceptives for 28 days per month with the traditional 7-day pill-free interval or they took the contraceptives continuously.

Although the number of bleeding days was reduced in women on the continuous OC regimen, the difference was not statistically significant due to a rebound in bleeding days by the study's conclusion, explained Dr. Legro.

The number of moderate to heavy bleeding days dropped to 1 day/month or less by cycle 2 in the continuous OC group, decreasing more slowly over time in women taking the 28-day OC regimen.

"If you biopsy, you get absolutely nothing [in patients on the continuous regimen]. There is no endometrium

there," Dr. Legro said in an interview at the meeting.

He said breakthrough bleeding in these patients might be explained by endometrial atrophy due to ovarian suppression, whereas in the 28-day group there was evidence for rebound follicular activity and ovulation following the pill-free interval.

Women taking continuous OC pills had a 25%-30% greater suppression of serum estrogen levels than those on the 28-day regimen.

Total ovarian volume, maximum diameter of the largest follicle, and endometrial thickness were all reduced significantly more in patients on the continu-

**In patients on the continuous regimen, there is no endometrium there when you biopsy.**

DR. LEGRO



ous regimen.

Scores on premenstrual pain, behavior, and distress scales were also lower for women assigned to receive continuous OC pills.

No differences were found between groups in terms of safety on measures of blood pressure, glucose and insulin levels, liver and renal profiles, thyroid-stimulating hormone, or lipids. ■

## Calcium, Vitamin D Linked To Lower Breast Cancer Risk

BY MARY ANN MOON  
Contributing Writer

High intakes of calcium and vitamin D were associated with lower breast cancer risk in premenopausal women in a large prospective study of more than 30,000 women.

The decreased risk appears to be most pronounced with aggressive breast tumors, study researchers wrote.

Animal studies have suggested that calcium and vitamin D may protect against breast cancer, but epidemiologic studies of the issue in humans have yielded conflicting results.

Jennifer Lin, Ph.D., of Harvard Medical School, Boston, and her associates used data from the Women's Health Study to examine intakes of the two nutrients in relation to breast cancer risk in more than 10,000 premenopausal and 20,000 postmenopausal subjects who were followed for an average of 10 years.

During that interval, 276 premenopausal and 743 postmenopausal women developed incident cases of invasive breast cancer.

Mean intakes of total calcium and vitamin D were 1,021 mg/day and 353 IU/day, respectively.

Among premenopausal women, there was a moderate association between lower risk of breast cancer and higher consumption of dietary and supplemental calcium and vitamin D.

When the women were divided into quintiles based on consumption, the multivariate hazard ratios in the highest quintile group relative to the lowest one were 0.61 for total calcium and 0.65 for total vitamin D intake.

This association was most pronounced in women who had cancers larger than 2 cm, poorly differentiated tumors, or pos-



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**These nutrients appear to lower breast cancer risk, but only before menopause.**

itive lymph nodes (Arch. Intern. Med. 2007;167:1050-9).

In contrast, among who were postmenopausal, consumption of calcium and vitamin D were not inversely associated with breast cancer, and tumor characteristics did not influence the relationship.

The reason why these nutrients may be linked to breast cancer risk only before menopause remains unknown, Dr. Lin and her associates said.

Research suggests that vitamin D may inhibit "late events of breast tumorigenesis," and it also may enhance apoptosis and reduce the proliferation of tumor cells.

Similarly, calcium is thought to slow the progression of breast cancer by inhibiting the secretion of certain proteins that play a key role in the growth of advanced tumors and metastasis, they added. ■

## Vaginal Repairs With Synthetic Mesh Improve Prolapse Stage, Quality of Life

BY DAMIAN McNAMARA  
Miami Bureau

CHAMPIONSGATE, FLA. — Vaginal prolapse repair with a synthetic propylene mesh kit yields significant improvements in prolapse stage and some quality-of-life variables, according to a study presented at the annual meeting of the Society of Gynecologic Surgeons.

"Surgical mesh kits were first approved in the United States in March 2004. Tens of thousands of kits have been used with little data to support their use," Dr. Cheryl B. Iglesia said during an oral presentation of her poster.

The limited study findings suggest that there may be problems with mesh exposure in approximately 6%-10% of patients and that there is significant postoperative pain in about 5%, according to Dr. Iglesia, who is director of urogynecology and reconstructive pelvic surgery at Washington Hospital Center.

Dr. Iglesia and her associates prospectively evaluated 25 women undergoing vaginal reconstructive surgery using a synthetic propylene mesh kit (ProLift, Ethicon).

Patients' prolapse stage was assessed at baseline and 3 months using the Pelvic Organ Prolapse Quantification (POP-Q) system.

The researchers also compared preoperative and postoperative quality of life using the short forms of the Pelvic Floor Distress Inventory (PFDI-20), Pelvic Floor Impact Questionnaire (PFIQ-7), and the Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12).

At study entry, the mean age was 66 years, the mean parity was three, and

mean body mass index was 28 kg/m<sup>2</sup>.

Most patients, 18 out of 25, had prior surgery, including hysterectomy.

All repairs were performed between July 2005 and April 2006.

Urodynamic stress incontinence, urodynamic detrusor overactivity, and mixed incontinence were among the presenting conditions.

A total of 18 patients had vaginal colpopexies with total ProLift mesh insertions; 5 patients had anterior ProLift placement, and 2 had a posterior ProLift procedure.

At the same time, three patients had a vaginal hysterectomy and four had suburethral tape sling placed.

There were four complications reported.

These included two vaginal mesh erosions that were surgically resected and two seromas with delayed bleeding. There were no mesh infections.

At baseline, the mean POP-Q score was 2.88. Before surgery, a total of 5 patients had stage 2 prolapse, 18 patients had stage 3 prolapse, and 2 had stage 4 prolapse.

The POP-Q mean score decreased to 0.55 at 3 months, Dr. Iglesia said at the meeting, which was jointly sponsored by the American College of Surgeons.

In terms of quality of life, there were statistically significant improvements in mean PFDI-20 summary scores, from 136 at baseline to 33 at 3 months.

Researchers also found that baseline PFIQ-7 summary scores significantly decreased from a mean of 78 to 3 at 3 months. Mean PISQ-12 scores dropped from 13 to 9.

The findings of this study warrant further investigation, Dr. Iglesia said. "Longer-term data are needed for mesh complications and patient and partner sexual satisfaction." ■