

## Endometrial Polyps Often Missed On Transvaginal Ultrasound

BY DOUG BRUNK

FROM THE ANNUAL MEETING OF THE AMERICAN INSTITUTE OF ULTRASOUND IN MEDICINE

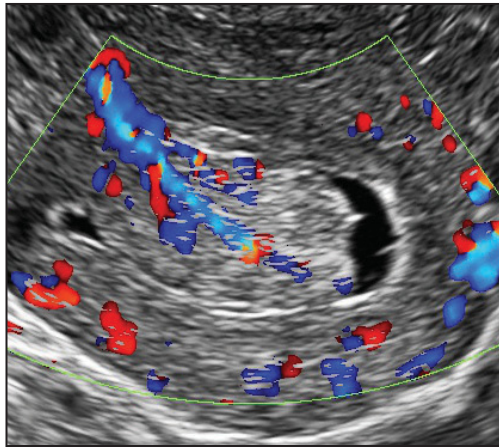
SAN DIEGO — Almost half of endometrial polyps seen on sonohysterography were missed on transvaginal ultrasound, results from a large single-center study showed.

The factors associated with lack of detection on ultrasound included smaller polyp size, multiplicity, submucosal fibroids, location of polyps, and blood flow to the polyps, Dr. Alex Hartman said at the meeting.

Between January and May of 2009, Dr. Hartman and his associates performed a blinded retrospective case study of 800 consecutive patients (mean age, 48 years) diagnosed with endometrial polyps on sonohysterography who also had preliminary transvaginal ultrasound within 48 hours of the sonohysterography.

The researchers assessed multiple factors, including patient age, size of the polyp, number of polyps, submucosal fibroids, intramural fibroids, adenomyosis, location of the polyp, blood flow, abnormal bleeding, endometrial thickness, polycystic ovaries, and fertility status. Pearson's chi-square tests and t-tests were used to compare the two samples.

Dr. Hartman, medical director of True North Imaging in Thornhill, Ont., went on to report that 433 patients (54%) with polyps diagnosed on ultrasound had their polyps seen on trans-



A large polyp is shown on sonohysterography. The blue and red represent blood flow.

vaginal ultrasound. The factors significantly associated with detection of a polyp on preliminary transvaginal ultrasound included larger polyp size (in general, the larger, the more likely seen); the presence of multiple polyps; the absence of submucosal fibroids; fundal location of the polyp; and the presence of blood flow to the polyp.

"Over the years, we found that polyps that were located in the fundus were much easier to see," Dr. Hartman commented. "The ones that were confined to the lower uterine segment and midbody were much harder to detect."

He also noted that 39 of the 800 patients (5%) also had submucosal fibroids. "Interestingly, only one-third of the polyps in these patients were diagnosed in the preliminary ultrasound study," Dr. Hartman said. "So the presence of submucosal fibroids made it very difficult to see polyps on regular ultrasound." ■

## Right-Sided Ovarian Cysts In Teens Tend to Resolve

BY ROBERT FINN

FROM THE ANNUAL MEETING OF THE NORTH AMERICAN SOCIETY FOR PEDIATRIC AND ADOLESCENT GYNECOLOGY

LAS VEGAS — It's well known that most ovarian cysts in adolescents resolve spontaneously, but for some unknown reason, those on the right side are far more likely to resolve than those on the left, a retrospective study of 151 teenaged girls showed.

Investigators at the University of Missouri-Kansas City determined that after adjustment for potential confounders, cysts on the left side were 116 times less likely to resolve without surgery than those on the right.

"You'd think that a right- or left-sided cyst wouldn't matter. It would spontaneously regress independently [of side]. But we found that a right-sided cyst was a predictor of cyst resolution," said coauthor Dr. Jeffrey Wall.

Dr. Wall and lead author Dr. Timothy Chad McCormick conducted the study by reviewing charts from 2000 to 2008 of all adolescent females with a diagnostic ICD-9 code consistent with an ovarian cyst or mass. There were 342 such patients. For the purposes of the study, the investigators included only 151 of those patients—those who had been followed until documented resolution or who underwent surgical intervention for nonresolution.

Of those patients, 91 (60%) had their cysts resolve spontaneously, while the others required surgery.

The researchers conducted a multivariate regression analysis that adjusted for age at diagnosis, race, cyst size, cyst volume, cyst side, and cyst complexity. Only two factors emerged as statistically significant independent predictors of resolution: cyst side and cyst size. The odds ratio for left-sided cysts was 116.39, indicating a far greater risk for left-sided cysts than for those on the right. The odds ratio for right cyst size was 0.42, indicating that right-sided

### VITALS

**Major Finding:** In adolescents, ovarian cysts on the left side are 116 times less likely to resolve spontaneously than those on the right.

**Data Source:** Retrospective analysis of data from 151 patients, aged 13-18 years.

**Disclosures:** None was reported.

cysts under 7 cm in size were 58% more likely to resolve spontaneously than larger right-sided cysts.

Dr. Wall had no explanation for their unusual findings, and that they intended to take a look at patient charts to see if they can identify any hypotheses.

Asked whether he would treat patients with left-sided cysts any differently as a result of this study, Dr. Wall said that he would not, at least not yet. "This was a new finding for us. It was unexpected," he said. "I would say [that physicians should] continue to manage them as they normally would. I would still observe them for a period of time. But if it is on the right side, it's certainly something you can tell the family: It's right sided, so there's a better chance. It's a reassuring thing if nothing else." ■

## Few Side Effect Differences Between DMPA-IM, DMPA-SC

BY ROBERT FINN

FROM THE ANNUAL MEETING OF THE NORTH AMERICAN SOCIETY FOR PEDIATRIC AND ADOLESCENT GYNECOLOGY

LAS VEGAS — The intramuscular and subcutaneous formulations of depot medroxyprogesterone acetate seem to have similar side effect profiles in adolescents, according to a randomized crossover study.

Although the side effects of the two formulations (DMPA-IM and DMPA-SC) have been studied in adult women, this is the first study in adolescents, Dr. Rebekah L. Williams said at the annual meeting of the North American Society for Pediatric and Adolescent Gynecology.

The randomized crossover study involved 55 young women aged 14-20 years, with a mean of 16.5 years. All participants were either initiating or

### VITALS

**Major Finding:** No significant differences were found in physical or sexual side effects in adolescents taking DMPA-IM and DMPA-SC.

**Data Source:** Randomized crossover trial of 55 adolescents.

**Disclosures:** The study was supported by the National Institutes of Health, the Health Resources and Services Administration, and the Indiana Clinical and Translational Sciences Institute. Dr. Williams said he had no conflicts of interest.

restarting DMPA therapy. Among the young women, 85% were African American and 20% said they had never had sex.

At baseline the participants completed surveys about their expectations regarding the side effects, and they were randomized to receive one of the two formulations. At the end of 3 months, participants answered questions about side effects, and then they were given the other formulation. At the end of another 3 months, the participants were again surveyed, after which

they were permitted to choose which formulation they preferred for a third injection. Thirty-eight of the women completed surveys at all three visits.

The investigators found no significant differences between the two formulations in participants' expectations or experience of physical or sexual side effects. In addition, the experience of side effects was not significantly related to expectations of side effects, participants' level of general worry, or their level of general concern about

birth control side effects.

Furthermore, with two exceptions, there was no difference in the expectation or experience of side effects between the participants' first and second injections, no matter in which order they received them.

The two exceptions were amenorrhea and irregular bleeding. During the first dose, 10.5% of the participants had amenorrhea, and this increased significantly to 31.6% at the second dose. In contrast, the proportion of women reporting irregular bleeding declined significantly from 26.3% at dose one to 7.9% at dose two.

Dr. Williams of Indiana University, Indianapolis, noticed a mismatch between expectations and experience for sexual side effects. "Over one-third of our sample experienced some change in sexual interest, and one-quarter experienced

changes in lubrication during sex," she said. "The striking difference between expectations between physical and sexual side effects may reflect our clinical practice, in that physical side effects are emphasized during contraceptive counseling but sexual side effects may be relatively neglected."

"Clinical counseling should include both physical and sexual side effects, both of which have the potential to significantly impact young women's contraceptive use in the long run."

One difference between the intramuscular and subcutaneous formulations emerged when the women were allowed to choose which one they would receive at the third visit. Of the 38 women who made it to that visit, 26 chose a subcutaneous injection, 9 chose an intramuscular injection, and 3 chose to discontinue DMPA. ■