

# Right-Sided Ovarian Cysts More Likely 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 adjusting for potential confounders, cysts on the left side were 116 times less likely to resolve without surgery than those on the right.

"It was kind of a surprising finding," coauthor Dr. Jeffrey Wall said in an interview. "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."

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.

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 cysts under

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

Dr. Wall said that the investigators have no explanation for their unusual findings, and that they intended to take a closer 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 right now."

Also reassuring, he said, was that the study confirmed that most ovarian cysts in adolescents do resolve spontaneously. ■

## 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.

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

The investigators conducted a multivariate regression analysis that adjusted for age at diagnosis, race, cyst size, cyst volume,

## VTE Risk Highest Later After Gynecologic Cancer Surgery

BY HEIDI SPLETE

FROM THE ANNUAL MEETING OF THE SOCIETY OF GYNECOLOGIC ONCOLOGISTS

SAN FRANCISCO — More than 75% of venous thromboembolisms linked to gynecologic cancer surgery occur more than a week after the procedure, based on data from 4,162 women aged 18 years and older who had undergone major gynecologic surgery between 1998 and 2008 at a single institution.

Few studies have addressed long-term postoperative risk of venous thromboembolism (VTE), and pro-

Patients with uterine cancers accounted for one-third (33%) of the VTEs that occurred this early, and those with cervical cancers including the cervix, vulva, and vagina made up a smaller group (3%).

But the proportion of VTEs in ovarian cancers decreased over time, to 58% during days 8-28 and 41% during days 29-90.

By contrast, the likelihood of VTE in cervical cancer patients increased over time, to 8% of all VTEs during days 8-28 and 20% during days 29-90, Dr. Peedicayil reported.

In a univariate analysis, ovarian cancer (including ovarian, tubal, and peritoneal) was an independent risk factor for VTE overall ( $P = .02$ ) and on days 8-90 ( $P = .04$ ).

In a multivariate analysis, independent risk factors for VTE included a previous VTE ( $P = .03$ ), blood loss of

500 mL or greater ( $P = .044$ ), and a hospital stay of more than 5 days ( $P = .044$ ), but only the hospital stay reached statistical significance, and only for the period from days 8 to 28 after surgery ( $P = .002$ ).

In all three time periods, incidence of VTEs increased with age; more than half (range, 57%-70%) occurred in women older than 60 years.

The results suggest that the majority of cases of VTE occur more than a week after surgery, beyond the time when most patients have been discharged, Dr. Peedicayil said. The findings support the use of prolonged VTE prophylaxis for high-risk patients, but more research is needed to define the highest-risk patients and to identify a more precise duration of VTE. ■

## VITALS

**Major Finding:** A total of 96 of 126 cases of VTE occurred more than a week after gynecologic cancer surgery.

**Data Source:** A nested case-control study based on a sample of 4,162 women who underwent major gynecologic cancer surgery.

**Disclosures:** None was reported.

longed prophylaxis might be warranted for high-risk cancer patients, said Dr. Abraham Peedicayil of the Mayo Clinic in Rochester, Minn.

To determine risk factors, timing, and incidence of late VTE, Dr. Peedicayil and his colleagues conducted a nested case-control study of 126 patients who had VTE within 90 days of surgery (an incidence of 3.03%) and matched controls who did not experience VTE.

The average age of the patients was 61 years.

Overall, 30 cases of VTE occurred on days 1-7 after surgery; 50 cases, on days 8-21; and 46, on days 22-90.

Based on location of the surgery, ovarian cancer patients had nearly two-thirds (64%) of the VTEs that occurred within the first week after surgery.

## Tamoxifen Found More Effective, Less Toxic Than Thalidomide

BY HEIDI SPLETE

FROM THE ANNUAL MEETING OF THE SOCIETY OF GYNECOLOGIC ONCOLOGISTS

SAN FRANCISCO — Oral thalidomide was associated with more severe toxicity and a significantly increased risk of disease progression and death, compared with tamoxifen, in a phase III trial conducted in women with recurrent, asymptomatic ovarian cancer.

"Tamoxifen may be a reasonable treatment alternative for patients with biochemical-recurrent ovarian cancer," said Dr. Jean Hurteau of the North Shore University Health System in Chicago. But he cautioned that the findings need to be validated in other randomized trials.

Tamoxifen plays an important role in the treatment of hormone-driven breast cancer, but evidence for its use in recurrent ovarian cancer is lacking, according to a Cochrane Review article in which the authors found no randomized trials on which to base recommendations (2010 [doi:10.1002/14651858.CD001034.pub2]).

The rationale for the current trial was that the comparative effectiveness of tamoxifen (a hormonal therapy) and thalidomide (an antiangiogenesis agent) was not known in recurrent ovarian cancer.

All participants had biochemical-recurrent ovarian cancer (defined as a rise in CA 125 of at least twice the upper limit of normal with no evidence of disease by RECIST (Response Evaluation Criteria in Solid Tumors) 1.0 criteria. Dr. Hurteau and his coinvestigators from the GOG (Gynecologic Oncology Group) 198 trial reported on 68 women who were randomized to receive a minimum of 200 mg of oral

thalidomide once daily (with a weekly dose escalation of 100 mg to a maximum of 400 mg), and 70 women randomized to receive 20 mg of oral tamoxifen twice daily.

The study group included women with FIGO stage III or IV confirmed epithelial ovarian, tubal, or primary peritoneal can-

## VITALS

**Major Finding:** Risk of progression at 24 months was 31% higher with thalidomide than with tamoxifen in women with recurrent, asymptomatic ovarian cancer.

**Data Source:** A phase III GOG trial in 138 patients.

**Disclosures:** None was reported.

cer who had completed first-line chemotherapy and whose CA 125 had normalized. The average age of the patients was 64 years, and 67% had grade III tumors, Dr. Hurteau said.

The women were assessed for toxicity every 4 weeks, and for disease progression every 12 weeks, until either disease progression or death.

Women who received thalidomide had a 31% increased risk of disease progression (hazard ratio, 1.31), compared with those who were given tamoxifen. Median progression-free survival was 3.2 months in the thalidomide group vs. 4.5 months in the tamoxifen group.

In terms of overall survival, women in the thalidomide group had a 76% increased risk of death (HR, 1.76) after 48 months, compared with those who took tamoxifen.

In addition, women in the thalidomide group experienced more grade III/IV toxicity, compared with the tamoxifen group (55% vs. 3%). Venous thromboembolism occurred in 6% of the thalidomide group and 1.4% of the tamoxifen group. ■