EDITORIAL

Don’t screen for ovarian Ca—but do pursue early detection

Consider vigilance by way of a two-step algorithm. The potential is there for you to improve outcomes.

More than 20,000 women in the United States will be given a diagnosis of ovarian cancer this year. In most of them, the disease will have disseminated by the time of diagnosis and will cause their death within a few years. In fact, only 20% of ovarian cancers are diagnosed at a stage at which enduring cure is possible.

Historically, gynecologists have held that ovarian cancer is a silent killer—no specific pattern of symptoms heralds the disease early in its course. Based in part on the idea that ovarian cancer is such a silent disease, a major focus of gynecologic research for the past 20 years has been to develop and evaluate screening protocols.

The problem with undertaking screening
Screening tests and examinations are intended to detect disease, such as cancer, in women who do not have any symptoms. The best examples are mammography for detecting breast cancer, cervical cytology for human papillomavirus disease, and colonoscopy for colon cancer and its precursors.

But there is no screening test for ovarian cancer that has been demonstrated effective. Except for women who have a presumed hereditary cancer syndrome, the American College of Obstetricians and Gynecologists, the American College of Physicians, and the US Preventive Services Task Force (USPSTF) all recommend against routine screening for ovarian cancer in asymptomatic women.1-4 Even though the USPSTF found “fair evidence that screening with CA-125 level or transvaginal ultrasound can detect ovarian cancer at an earlier stage than it can be detected in the absence of screening,” such earlier detection, evidence also indicated, would likely have a small effect at best on mortality from ovarian cancer.

Because of the low prevalence of ovarian cancer and the invasive nature of diagnostic testing after a positive screening test, there is also fair evidence that screening could likely lead to significant harms. This knowledge led the USPSTF to conclude that the potential harm of screening for ovarian cancer outweighs the potential benefit.

Research opens a new direction for detection
Now, thanks to the findings of recent research, the focus has shifted from screening asymptomatic women for ovarian cancer to early detection, using a thorough history that identifies women with symptoms significantly associated with ovarian cancer.

CONTINUED
In a recent study, the four symptoms most highly and reliably associated with a diagnosis of ovarian cancer were:

- pelvic pain
- abdominal pain
- increased abdominal size
- abdominal bloating

when any of these symptoms occur at least 12 days a month for less than 1 year.

Two other symptoms:
- a rapid feeling of fullness when eating (early satiety)
- difficulty eating

were also associated with a risk of ovarian cancer.

Both premenopausal and postmenopausal women who had ovarian cancer exhibited one or more symptoms of this constellation.

**Symptoms select patients who should be studied**

Taking into account those six (the four core and the additional two) symptoms, approximately two thirds to three quarters of women who had ovarian cancer were noted to report at least one of the symptoms. This finding raises the possibility that a symptom questionnaire could identify a subset of women who should be given a thorough physical examination, a test for CA-125, and pelvic ultrasonography (US). The hope is that the number of women who report these symptoms but who are in fact free of cancerous disease will be small enough to minimize the number of healthy women subjected unnecessarily to the three procedures.

Recall bias may be an important factor that influences the perception that specific symptoms, such as abdominal bloating, were present long before the diagnosis of ovarian cancer. Two large, population-based studies indicate, however, that symptoms—abdominal pain, pelvic pain, abdominal swelling, and other gastrointestinal symptoms such as nausea and vomiting—are in fact present before a diagnosis of ovarian cancer is made. In one study, 81% of women who had ovarian cancer had at least one gastrointestinal or gynecologic symptom before being given their diagnosis.

In mid-June, the American Cancer Society, the Gynecologic Cancer Foundation, and the Society of Gynecologic Oncologists announced their joint endorsement of a consensus statement that calls for women who experience any of the symptoms I listed earlier almost daily for a few weeks to see their gynecologist and have a thorough examination. Then, if appropriate, the serum level of CA-125 should be measured and pelvic US performed.

The consensus statement cautions that it is possible that heightened awareness of the symptoms of ovarian cancer will lead to better outcomes through early detection clinical trials—even though this approach has not yet been scientifically demonstrated.

**To sum up a major change in practice**

In clinical practice, during an office visit, a two-step algorithm for early detection

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**Two-step office-visit plan may detect ovarian Ca early**

**STEP #1**
The patient undergoes a physical exam

**AND**
completes a questionnaire about abdominal pain, pelvic pain, abdominal bloating, increased abdominal size, early satiety, and difficulty eating

**STEP #2**
IF
the patient reports that she experiences these symptoms more often than 12 days a month

**THEN**
a serum CA-125 assay and pelvic US are ordered

**AND**
she is evaluated surgically if the test is positive or the scan is abnormal

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**FAST TRACK**
Pelvic and abdominal pain, increased abdominal size, and abdominal bloating are highly associated with ovarian Ca
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of ovarian cancer is likely to be most effective:

STEP #1
In tandem with a physical examination, have the patient complete a questionnaire that focuses on such symptoms as abdominal pain, pelvic pain, abdominal bloating, increased abdominal size, early satiety, and difficulty eating.

STEP #2
If the patient reports that she experiences these symptoms more often than 12 days a month, order a serum CA-125 assay and pelvic US; pursue surgical evaluation in the presence of a positive test result or an abnormal finding on US.

Deployment of such an early detection approach to ovarian cancer represents a major change in gynecologic practice. And early detection will, we would hope, reduce the great suffering caused by ovarian cancer.

References
3. ACOG Committee on Gynecologic Practice. The role of the generalist obstetrician-gynecologist in the early detection of ovarian cancer. Gynecol Oncol. 2002;87:237–239.