Ovarian Cysts and Masses in Menopause

Once a woman enters menopause, there is an expectation that the ovaries become inactive. While they do have a lower level of activity they are still capable of producing cysts. Fortunately, the great majority of these are benign and need no therapy. Dr. Holtz presents for us what is considered normal and what are signs that cause concern.

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"Menopause and You" *Program*

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With the increased use of imaging and the recognition by primary care doctors that ovarian cancers present with subtle symptoms, more ovarian masses are being detected in postmenopausal women. In screening studies, between 5-20% of women over the age of 50 with no other symptoms will have an ovarian mass detected on ultrasound. However, only a percentage of these will prove to be ovarian cancer after surgery. Thus, it is important for us to try to distinguish ovarian cysts that can be monitored with repeat ultrasound studies from masses that need to be surgically evaluated due to their elevated risk of early ovarian cancer.

Importance of Health History

A women's history can give clues as to the nature of an ovarian mass. Some factors are protective against cancer: pregnancy and childbirth in a women's 20's, use of birth control pills, and a history of tubal ligation or hysterectomy. A strong family history of cancers of the breast, ovary, colon, or endometrium may be part of a hereditary cancer syndrome; however, only 5-10% of ovarian cancers are related to heredity.

Evaluating Cysts and Masses

Transabdominal and transvaginal ultrasound have become a mainstay for the evaluation of pelvic masses due to their low cost and minimal invasiveness. When reviewing ultrasound reports, there are five characteristics that are important in differentiating ovarian cysts with a low likelihood of harboring an ovarian cancer from masses with a higher risk. These characteristics are:

1) Size

2) Complexity of the cyst (1 simple bubble of fluid versus many bubbles of fluid)

3) Solid areas

4) Projections into the fluid called papillations

5) Ovarian blood flow as measured by colored Doppler assessment.

In postmenopausal women with simple ovarian cysts less than 5 cm, the risk of an ovarian cancer is very small (0-1%). In a large study conducted at the University of Kentucky, no women with simple ovarian cysts <10 cm in diameter developed ovarian cancer. However, complex cysts with solid areas and papillations, 10-40% of these tumors will harbor a malignancy.

CA125 Testing

CA125 is a blood test that can be performed to help the physician to determine the risk of ovarian cancer. However, an elevated CA125 is nonspecific and can be elevated in the face of many common benign findings such as pregnancy, uterine fibroids, menses, and endometriosis. It can also be elevated by non-ovarian malignancies such as stomach cancer, colon cancer, and cancer of the liver.

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In postmenopausal patients, however, the accuracy of predicting ovarian malignancy increases considerably. The higher the level of CA125, the more it is likely that an ovarian mass is malignant. A note of caution, however, CA125 is elevated above normal in only 50% of patients with Stage 1 ovarian cancer and may miss half of the patients with a localized tumor. In other words when the CA125 is elevated it raises your concern, but if the CA125 is normal it is not a guarantee of normal findings.

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MRI

Some patients may benefit from further imagining studies. The elderly, the sick, or patients who simply refuse surgery may benefit from an MRI. An MRI of the ovary is not diagnostic for cancer; however, it is very sensitive for benign ovarian masses such as dermoids or uterine fibroids that can be confused with ovarian masses. Thus, MRI's should be reserved for patients with indeterminate ultrasound findings who cannot have surgery because of the costs, the need for intravenous dye, and claustrophobia of the machine.

Consulting with a doctor

Women who have concerns with ultrasound or CA-125 studies should have a consultation with a fellowship-trained subspecialist in women's cancers. Gynecologic Oncologist have specialized training in the management and surgery for women's cancers. Consultation can help a patient understand her risks for a cancer and plan for the proper surgical procedure. Gynecologic oncologists are five times more likely to completely remove ovarian tumors, and 80% of ovarian cancer patients receive inadequate surgical staging from non-gynecologic oncologist surgeons. Most importantly, survival outcomes are vastly improved when gynecologic oncologists are involved in a patient's care.

Treatment

Treatment of ovarian cysts has been made more convenient with the introduction of laparoscopy in the 1980's. Through the laparoscope the entire abdomen can be viewed, the ovaries can be removed and sent for pathology – all through incisions less than a half inch in size. This greatly reduces the length of time that a woman has to spend in the hospital, the length of time that she has to remain out of work, and reduces the risk of postoperative infections and hernias. Laparoscopy is not appropriate for everyone. Most gynecologists hesitate to perform laparoscopic surgery on larger ovarian cysts. Some gynecologic oncologists are trained to perform staging (biopsies and removal of lymph nodes) laparoscopically if an ovarian mass should prove to be a cancer. Studies have shown that the outcomes after laparoscopic staging are the same as the equivalent open surgery.

In summary, ovarian cysts are common in post-menopausal women. Simple cysts < 5 cm in diameter without concerning features can safely be followed with repeated ultrasounds. Other ovarian masses should be referred to gynecologic oncologists for appropriate surgery which may include laparoscopic removal of the ovaries with staging procedure if necessary.

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MLH.WHS.1/06.CR.15