Evaluation and Management of Ultrasonographically Detected Ovarian Tumors in Asymptomatic Women

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(Obstet Gynecol 2016;127:848–58)

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Question 1:

Has there been any discussion in radiology or the obstetrics and gynecology literature regarding the standardization of reporting of cysts on ultrasonography to make morphology indexing easier and more uniform?

Response from Dr. van Nagell:

I am not aware of a position statement by the American College of Radiology concerning standardized reporting of ovarian cysts. However, the Society of Radiologists in Ultrasound Consensus Conference guidelines state that the diameter of ovarian cysts and the thickness and number of septa within these cysts should be reported in all cases (see Radiology 2010; 256:943–54). The morphology index reported by Ueland et al (see Gynecol Oncol 2003; 91:46-50), which assigns a numeric value based on cyst volume and morphology, relates well to reported variables, and is easy to interpret with minimal inter-observer variation. Therefore, we prefer the use of this morphology index rather than others.

Question 2:

Management of a complex cyst revolves around premenopausal and postmenopausal status. Has there been any attempt to stratify based on age (eg, age younger than 20 years, 21–30 years, 31–40 years, and so on)?

Response from Dr. van Nagell:

The management of a complex ovarian cyst can be influenced by a number of factors including the patient’s age, family history, and menopausal status. The risk of malignancy in a complex ovarian cyst is higher in a postmenopausal woman aged 60 years than a premenopausal woman aged 40 years. However, the association of certain morphologic findings with risk of malignancy is present in all age groups. Therefore, treatment should be based on a thorough analysis of tumor volume, tumor morphology, and patient demographics in each case.
Question 3:

Are there roles for other forms of imaging in certain cases?

Response from Dr. van Nagell:

In certain cases, it may be difficult to completely assess ovarian tumors larger than 7 cm in diameter by ultrasonography alone. Therefore, both magnetic resonance imaging and computed tomography scans may provide additional useful information in these patients.

Question 4:

What do you believe the future of management of ovarian cancer holds (ie, new tumor markers, better imaging, new algorithms)?

Response from Dr. van Nagell:

Earlier detection through public education and screening high-risk populations offers hope for reducing ovarian cancer mortality. Also, adoption of effective diagnostic and treatment algorithms allows appropriate treatment of low-risk ovarian tumors as well as identifying patients with high-risk ovarian tumors who should be referred to a gynecologic oncologist. This is important because the triage of patients with ovarian cancer to specialized oncology centers prior to surgery has been associated with improved patient survival.

Question 5:

These tools (ie, morphology indexes, serum markers, and algorithms) are helpful for physicians in their decision-making process, but what are the practical considerations when counseling patients?

Response from Dr. van Nagell:

The use of tumor morphology indexing and biomarker analysis allows a physician to more accurately assess risk of malignancy in an individual ovarian tumor. This information is essential in providing a meaningful discussion with patients regarding optimal treatment.

Question 6:

For women who elect for conservative management with serial ultrasonography, when should their screening timeframe be extended or ceased if no change is noted?

Response from Dr. van Nagell:

There is little prospective data concerning the optimal duration of ultrasound surveillance in patients who elect conservative management of their ovarian tumor. We currently recommend an initial repeat ultrasonogram in 3 months, then every 12 months for 5 years provided that the patient has a low-risk ovarian tumor that remains stable in volume and morphology.
Question 7:

Where do you see most physicians making mistakes or being too conservative or too aggressive with asymptomatic ovarian tumors?

Response from Dr. van Nagell:

I believe the greatest mistake is not adopting a uniform data-based evaluation algorithm for all patients with a documented ovarian tumor. These algorithms provide the most accurate assessment of risk of malignancy in ovarian tumors, and it is often difficult to predict outcome in a given patient on a basis of clinical experience alone. Unilocular or septated cystic ovarian tumors may resolve spontaneously, and surgery can be avoided entirely. On the other hand, it has been documented that optimal survival for ovarian cancer patients occurs when they are treated by gynecologic oncologists. Therefore, the decision concerning where the initial surgery is performed may be lifesaving.