

# Ultrasound Helps Rule Out Ovarian Malignancies

BY ALICIA AULT

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ASHEVILLE, N.C. — Ultrasound can be an important tool in classifying suspicious ovarian masses, Dr. Angela Gantt said at the Southern Obstetric and Gynecologic Seminar.

Because of the burgeoning problem with obesity, it has become more difficult to determine which masses may be dangerous by feel alone, said Dr. Gantt of the department of obstetrics and gynecology at the University of North Carolina at Chapel Hill. "If you feel something abnormal, ultrasound helps you determine what course to take."

According to Dr. Gantt, 13%-21% of women who have a suspicious mass end up having surgery, so it's important to determine the nature of the mass. Ultrasound can be used to rule out a malignancy because it offers high sensitivity. Unfortunately, it is not very specific.

It takes a skilled technician to properly interpret an exam, but even so, the technology offers many advantages: It is ubiquitous, offers information quickly, and can distinguish physiologic from pathologic processes, Dr. Gantt said.

Among the pearls offered by Dr. Gantt: If an ovary is surrounding a mass, it is probably not a cancer; solid masses should be the subject of more imaging or surgical intervention; a simple cyst of less than 4 cm can be managed conservatively; a larger cyst puts the ovary at risk; pay particular attention to a solid mass in a

woman over age 50, as 80% of cancers are diagnosed in this group; and never rule out a pregnancy in women aged 13-65.

The most common finding is a simple cyst, which is almost always benign and includes follicular cysts, corpus luteal cysts, ovarian surface inclusion cysts, and para-ovarian/paratubal cysts. On ultrasound, these are generally thin-walled (less than 3 mm), have oval-shaped or circular walls, no solid components, no septations, and no internal vascular activity, Dr. Gantt said. Generally, these cysts are observed.

For premenopausal women, if cysts are less than 4 cm, a follow-up ultrasound is not generally recommended; at 4-7 cm, a follow-up scan can be done in 10-12 weeks. Surgical evaluation is recommended in cysts larger than 7 cm.

Recommendations are slightly different for postmenopausal women, she said. Cysts of less than 3 cm should receive a repeat ultrasound in 10-12 weeks and again in 6 months and every year if they are stable. At 3-5 cm, a follow-up scan should be done at 10-12 weeks; if stable, the physician should weigh a follow-up ultrasound or surgical evaluation. Surgery is recommended for cysts larger than 5 cm in these women.

Ultrasound can be an especially good tool for more complex masses, which can be classified with Timor's scoring system, which assigns a numerical score based on the inner wall features, wall thickness, septa, and echogenicity. Often, a peritoneal pseudocyst can mimic complex multicystic ovaries. The pseudocysts are common in patients with a history of pelvic inflam-

matory disease or abdominal surgery.

Hemorrhagic corpus luteum can be difficult to distinguish from malignancy. Typically, it presents as a spiderweb-like pattern, Dr. Gantt said. With Doppler, it becomes clear there is no vascular activity within the cyst, and the contents tend to morph with any probing. Repeat ultrasounds should be conducted, as the condition tends to resolve within two cycles.

Endometriosis is often confused with hemorrhagic corpus luteum. Ultrasound can be used to support a clinician's diagnosis, but it's not as good at confirming the condition until it is at a later stage, Dr. Gantt said. The test will show a cyst with thickened walls and echogenic foci in the walls, along with no vascular activity.

Similarly, the technology is not as accurate in diagnosing pelvic inflammatory disease in its early stages, she said.

Ultrasound is helpful for distinguishing adnexal myomas, which also can be confused with solid tumors. Doppler can be used to identify vasculature to the uterine cavity. The most common benign ovarian mass is a mature teratoma. Its size generally makes it symptomatic, though symptoms are variable, Dr. Gantt said. As it gets larger, there is a risk of ovarian torsion. On ultrasound, it may be dense, so the key is to look for the "tip of the iceberg" sign, which will be hyperechoic with posterior shadowing. It may also show as hyperechoic speckling or as diffuse dots and lines within the cyst.

Finally, malignancies will be solid, though extremely variable, with irregular



Normal ovarian tissue (crescent sign) is a marker for a nonmalignant process.



Cystic and solid components with hypervascularity may mean malignancy.

PHOTOS COURTESY DR. ANGELA GANTT

outlines or walls, and thickened cyst walls and septations of greater than 3 mm. There may be papillary projections into the cyst from the cyst wall. And the vascular pattern and flow, as shown by Doppler, is very abnormal and irregular. ■

## Interview, Examination Equally Valuable in Vulvar Diagnosis

BY BETSY BATES

Los Angeles Bureau

CORONADO, CALIF. — Patience, persistence, and asking patients the right questions are key to diagnosing vulvar disease, Dr. Erika Klemperer said at the annual meeting of the California Society of Dermatology and Dermatologic Surgery.

Does it itch? Is it the type of itch you want to scratch? Does scratching make it feel better or worse? The answers to these questions, along with a thorough examination and possibly a biopsy, may bring clarity to what otherwise might be a challenging clinical evaluation.

"The vulvar anatomy is just skin, but it's unique," said Dr. Klemperer, a dermatologist in private practice in Santa Barbara, Calif.

Conditions that may be obvious elsewhere on the skin can look different in the vulvar region, either because of moisture, pigmentation, skin fragility, or complications of yeast, bacteria, or contact or irritant dermatitis. That's why, after Dr. Klemperer has taken the time to put patients at ease, she

asks them specific questions about their symptoms.

Pruritus that makes a patient want to scratch points to the possibility of lichen simplex chronicus or lichen sclerosis. If scratching feels good, the diagnosis leans toward lichen simplex chronicus. If scratching makes things worse, think lichen sclerosis, she said.

When patients complain of pain, Dr. Klemperer asks more questions. Erosive disorders should enter the differential diagnosis if patients complain of a

raw sensation. Burning pain opens up the possibility of vulvar pain syndromes.

Finally, it pays to ask patients what they have used, on order of another physician or on their own, to treat their symptoms, because treatments may be driving the primary or secondary diagnosis. It took five visits for one patient with necrotic ulcers to admit she had been scrubbing her vulva with Lysol disinfectant thinking if she got clean enough, her symptoms would resolve.

As this case illustrates, the psychologic component of vulvar disease cannot be overstated. By the time some women see a dermatologist, they may have long endured profound symptoms, often becoming desperate in their attempts to self-treat their symptoms or seek help from other clinicians. Their self-esteem and sexuality may be affected, and they may fear a diagnosis of a sexually transmitted disease or cancer.

"These women are often miserable. [They] need extra time.

They need a really supportive environment," she said.

A complete examination of the genital region under magnification and with proper lighting may reveal obvious or very subtle signs to guide the diagnosis. Manipulating the skin folds is important, since they may obscure fissures and erosions, the fernlike patches of lichen planus, or scarring.

But typical signs of skin disease may not be present in the vulvar region, Dr. Klemperer cautioned.

A thorough mucocutaneous examination will often reveal better clues, such as the classic skin changes of psoriasis that demystified the diffuse erythema on one patient's vulva.

Unusual morphology and often nonspecific clinical vulvovaginal findings mean that biopsy is important to an accurate diagnosis, she explained.

Vulvar skin's unique physiology also makes it more permeable, more susceptible to irritant activity, and more sensitive to stimuli, such as itch and pain. It has a unique microbial ecology and increased blood flow—important considerations when weighing therapeutic options, she said. ■

### Know What's Normal to Catch What's Abnormal

Normal anatomic variants of the vulva include:

- ▶ **Vulvar erythema.** There is a "huge variation" in the pinkness of the vulva by ethnicity, skin type, and simple differences between individuals. "Redness can be normal. The important thing is change," Dr. Klemperer explained.
- ▶ **Vestibular papillae.** These 1- to 2-mm, soft, filiform papules are sometimes misdiagnosed as condylomata.
- ▶ **Labial papillae.** Generally seen on the tips of the labia minora, these may have a cobblestone appearance. They are normal.
- ▶ **Fordyce's spots.** These often occur on the

medial aspect of the labia minora. Like the yellowish, globular papules seen in the mouth, they are common sebaceous glands.

- ▶ **Labia minora variations.** The labia minora can appear as "little vestigial remnants or large, redundant skin." They may be asymmetric.

- ▶ **Syringomata.** Commonly seen on the labia majora, these 2- to 5-mm, skin-colored or hyperpigmented papules are often seen in clusters. They are frequently misdiagnosed and mistreated as genital warts.

- ▶ **Angiokeratomas.** These asymptomatic reddish or bluish papules are benign.

Source: Dr. Klemperer