# Imaging Advances Assist Gyn. Cancer Detection

#### BY BETSY BATES Los Angeles Bureau

PASADENA, CALIF. — Imaging for gynecologic cancer has been greatly improved with fusion techniques that combine the structural and anatomic information from ultrasound, MRI, and CT with metabolic clues highlighted by PET scans.

This is really the wave of the future," Dr. Robin Farias-Eisner, professor and chief of gynecology at the University of California, Los Angeles, said at a meeting of the Obstetrical and Gynecological Assembly of Southern California.

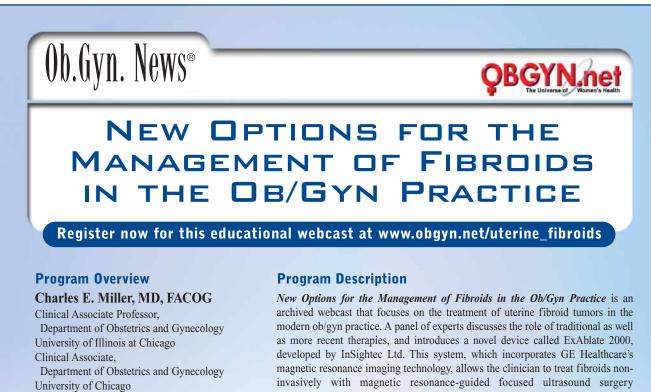
Advances in traditional imaging techniques over the past 2 decades have been "great, but not good enough," in terms of their overall sensitivity, specificity, and accuracy, Dr. Farias-Eisner said.

A major problem has been the difficulty of identifying microscopic disease in lymph nodes using modalities that depict anatomy and structure. Lymph node

metastases not only have an impact on survival, they also dictate treatment, particularly in cervical cancer.

It is here, said Dr. Farias-Eisner, that positron emission tomography with <sup>18</sup>fluorodeoxyglucose (FDG-PET) holds the most promise; FDG is a glucose analogue.

He displayed a magnetic resonance image of a 63-year-old woman with stage IIB uterine cervical carcinoma that appeared to show lymphadenopathy. A transaxial PET scan of the same patient showed ab-



# **Understanding and Using MR-Guided Focused Ultrasound Technology for the Treatment of Fibroids**

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### **Clinical Results: MR-Guided Focused Ultrasound** for Uterine Fibroids

Elizabeth A. Stewart, MD, FACOG Clinical Director, Center for Uterine Fibroids Brigham and Women's Hospital Associate Professor of Obstetrics, Gynecology and Reproductive Biology Harvard Medical School, Boston

## **Incorporating GE Signa HDMR** and InSightec ExAblate® 2000 into the Office-Based Ob/Gyn Practice Phyllis J. Gee, MD, FACOG

Medical Director, North Texas Uterine Fibroid Institute, Plano



invasively with magnetic resonance-guided focused ultrasound surgery (MRgFUS). The system and the MRgFUS procedure received FDA approval in October 2004, which expedited review because it offers significant advantages over existing treatments for uterine fibroids.

A discussion of this type is important because between 20% and 40% of all women over 35 years of age have uterine fibroids. Fewer than 0.1% of fibroids become cancerous, but treatment is required when symptoms interfere with patients' health or quality of life. Hysterectomy, the most frequently used treatment for fibroids, is associated with the usual surgical risks and complications, requires a hospital stay, and results in patient downtime of up to 6 weeks or more. Many of the newer therapies offer fewer risks, only a brief hospital stay, and a shorter recuperation period. The most recently introduced alternative to hysterectomy, MRgFUS, is associated with minimal risks and complications, requires no overnight hospital stay, and allows most patients to return to their normal activities in a few days.

After viewing the webcast, it should be clear that this technology represents a significant advance in treatment and is a method that ob/gyn clinicians should consider including in their treatment armamentarium

#### **Intended Audience**

Ob/gyn specialists and other healthcare professionals involved in the treatment of uterine fibroids.

#### **Objectives**

After viewing this webcast, clinicians should understand:

- The role magnetic resonance-guided ultrasound surgery (MRgFUS) can play in the care of patients with uterine fibroids.
- · How the ExAblate MRgFUS and GE Signa HDMR system works to treat uterine fibroids noninvasively.
- How ob/gyn specialists can offer this new treatment in their own practices.

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imagination at work

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normally high uptake of the FDG isomer, and a fusion scan of the images superimposed on each other demonstrated high uptake in both internal iliac lymph nodes, as well as in the sigmoid colon.

In case after case, the fused image completed the picture, demonstrating metabolic tumor activity in a precise location.

Another advantage of incorporating FDG-PET into the work-up is that it provides an evaluation of the whole body.

Finally, it can point to disease in patients whose normal anatomic landmarks have been lost to surgery or radiation.

Dr. Farias-Eisner also expressed enthusiasm about lymphoscintigraphy, in which technetium is injected to help localize the sentinel lymph node in cervical, endometrial, and vulvar cancers.

Advances in ultrasonography are also being studied internationally, including the use of a microbubble contrast agent that enhances the intensity of malignant tissue, when compared with benign tissue, Dr. Farias-Eisner said.

# **Be All-Inclusive** When Advising **On Cervical Ca**

KAILUA KONA, HAWAII — Think of both ends of the fertility spectrum when advising women about preventing or treating cervical cancer, Kimberly D. Baker, J.D., said at a conference on obstetrics, gynecology, perinatal medicine, neonatology, and the law.

An increasing number of malpractice cases are being brought by teenagers who claim that no one adequately explained the risks of sexual activity and of avoiding Pap smears, said Ms. Baker, a defense lawyer in Seattle who also holds a bachelor's degree in nursing.

These adolescents lack an understanding of the threats that sexual activity and a lack of screening can pose to their bodies, their fertility, and even their lives if they contract a sexually transmitted disease. Physicians "are being too casual about this," she said. "You need to document exactly what you said" in counseling the patient.

Explain things in terms that the teenager can understand, Ms. Baker said at the conference, which was sponsored by Boston University.

If a cervical lesion needs treatment, be sure to discuss the potential effects on fertility, especially when counseling young patients and older patients, she added. As more and more women delay childbearing, an increase in malpractice cases related to cervical cancer is being seen on the older end of the age spectrum when treatment fails to protect fertility, and the patient isn't warned of possible effects on fertility.

"Along with that, there needs to be a frank discussion about what is not available to them" if cervical cancer treatment affects fertility, she said.

