

Study Looks at US Predictors of Adenomyosis

BY DOUG BRUNK

SAN DIEGO — The best clinical predictors of adenomyosis on ultrasound are a heterogeneous myometrium, myometrial cysts, striations, and increased vascularity in the area of interest.

Those are the key findings from a single-center study that set out to determine which findings suggestive of adenomyosis increase the accuracy and diagnostic capabilities of transvaginal ultrasound and to evaluate whether the presence of fibroids impacts the correct diagnosis of the condition.

Defined as the presence of ectopic endometrial glands and stroma in the myo-

metrium, the incidence of adenomyosis is believed to range from 1% to 70%, “depending on how meticulous the pathologic analysis is,” Dr. Francisco Cruz-Pachano said at the annual meeting of the American Institute of Ultrasound in Medicine.

“Symptoms that accompany adenomyosis are dysmenorrhea, pelvic pain, and menorrhagia, but most of the time it is asymptomatic. Up to two-thirds of cases coexist with other pathology, most of the time with fibroids,” he said.

Dr. Cruz-Pachano of the ultrasound division of the department of obstetrics and gynecology at the University of Miami and his associates reviewed the pathology reports and images of 85 patients diagnosed with adenomyosis by ultrasound at Jackson Memorial Hospital in Miami from August 2007 to August 2009. They made the diagnosis of adenomyosis on the basis of seven different ultrasound findings: an enlarged and globular uterus, a heterogeneous myometrium, myometrial cysts, a difference in the anteroposterior myometrial thickness, endomyometrial striations, loss of the endomyometrial junction, and myo-



Echogenic linear striations (above) are one of four ultrasound findings shown to predict adenomyosis.

metrial hypervascularity. Each finding was analyzed to assess the diagnostic accuracy by itself and as part of the group.

Among the patients (mean age, 46), 54% were Hispanic; 38%, black; and 8%, white. The researchers initially divided patients into two groups: 59 with adenomyosis and 26 without the condition.

They further divided the adenomyosis group into 25 who had adenomyosis and 34 who had adenomyosis plus fibroids, to control for potential confounders.

Dr. Cruz-Pachano said that the four most significant clinical findings of ade-

nomiyosis on ultrasound were increased vascularity (100%), the presence of myometrial cysts (86%), striations (82%), and a heterogeneous appearance (78%).

He noted that when transvaginal imaging of the uterus reveals these four findings, adenomyosis can be diagnosed with a sensitivity greater than 90%, a specificity greater than 66%, a positive predictive value greater than 86%, and an accuracy of more than 84%.

In the subset of patients with adenomyosis and fibroids, the only significant clinical findings were increased vascularity (64%) and striations (55%). “When fibroids are present, the enlarged/globular and loss of endomyometrial junction characteristics can’t be used to diagnose adenomyosis,” Dr. Cruz-Pachano said. “When fibroids are present, the visualization of striations or increased vascularity has an increased sensitivity to help diagnose adenomyosis.”

VITALS

Major Finding: When transvaginal imaging of the uterus reveals a heterogeneous myometrium, subendometrial myometrial cysts, striations, and increased vascularity in the area of interest, adenomyosis can be diagnosed with a sensitivity greater than 90%, a specificity greater than 66%, a positive predictive value greater than 86%, and an accuracy of greater than 84%.

Data Source: A single-center review of 85 patients diagnosed with adenomyosis by ultrasound.

Disclosures: None was reported.

Having a baby should be all heart, no burn.

TUMS Ultra. Because pregnancy heartburn shouldn't spoil an expectant mother's joy.

TUMS Ultra. Safely relieves pregnancy heartburn fast. Plus it has the calcium she needs.

- Goes to work in seconds
- Nothing works faster
- 2,000 mg of calcium carbonate per 2-tablet dose (800 mg elemental calcium)
- And it's safe to take during pregnancy



For fast, safe relief from pregnancy heartburn, recommend

TUMS Ultra.