The significance of three-dimensional sonographic evaluation of the uterine junctional zone in the diagnosis of adenomyosis

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Objectives
The aim of the study is to define the three-dimensional sonographic appearance of disorder in the Junctional zone (JZ) in women with adenomyosis, detected on it diagnostic accuracy for adenomyosis.

Methods
A total of 60 patients were included in this study. Premenopausal patients of 30 scheduled for hysterectomy for diffuse adenomyosis were enrolled in target group. The control group consisted of 30 premenopausal women got cervical cancer was referred to as FIGOIA, IB stage. pathology confirmed that the uterus was completely normal. The major sonographic signs of adenomyosis were noted and the thickness of the JZ was measured on the multiplanar coronal views obtained by 3D-TVS in all patients from both group (n = 60). We measured the maximum JZ thickness at the left and right side walls and at the bottom of the palace from the basal endometrium to the internal layer of the outer myometrium.

Results
JZ in the lesions of adenomyosis of 7 patients in the case group become thinner than the normal sides, average M = 0.37, SD = 0.11mm, P = 0.000, has statistically significant. JZ in the lesions of adenomyosis of 23 patients in the case group was disappear completely, average M = 0.00, SD = 0.00mm, P = 0.000, there was a statistically significant difference compared to the thickness of the opposite side.

Conclusion
The coronal section of the uterus obtained by 3D-TVS permits accurate evaluation and measurement of the JZ, which has a good diagnostic significance for adenomyosis.