

Evidence Discussion (PV 4.1)

- Transabdominal pelvic and/or transvaginal pelvic ultrasound are widely accepted as the initial imaging modality of choice for evaluation of adenomyosis.^{1,2,3,4} Ultrasound also allows for real-time evaluation with color and power Doppler which can help identify vascular flow and distinguish fluid and cysts from soft tissue.¹ In the presence of features mimicking leiomyomas, Doppler US displaying vessels perpendicular to the endometrial interface, is suggestive of adenomyosis.³ Transvaginal ultrasound has a sensitivity of 83.8% and specificity of 63.9% for adenomyosis.^{5,6} The overall diagnostic accuracy of the use of transvaginal ultrasound with color Doppler for adenomyosis is 93.8%.⁶ Additional benefits to ultrasound as a first line imaging modality include wide availability, fast access, and lack of ionizing radiation exposure.
- MRI of the pelvis is a second-line examination in the diagnosis of adenomyosis, mainly after an inconclusive US evaluation.³ MRI pelvis is useful in individuals with coexisting leiomyoma.³ A meta-analysis comparing the diagnostic performance of MRI and transvaginal ultrasound reported that MRI had a pooled sensitivity of 77% and a specificity of 89%.³ The authors concluded that MRI performs more favorably than transvaginal ultrasound in the presence of associated uterine leiomyomas.³

References

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