Summary & Conclusion

Endometriosis is an important gynecologic disorder primarily affecting women during their reproductive years. Pathologically, it is the result of functional endometrium located outside the uterus. It may vary from microscopic endometriotic implants to large cysts (endometriomas).

The physical manifestations are protean, with some patients being asymptomatic and others having disabling pelvic pain, infertility, or adnexal masses.

Symptoms do not necessarily correlate with the severity of the disease. Ultrasonographic features are variable and can mimic those of other benign and malignant ovarian lesions. Magnetic resonance imaging improves diagnostic accuracy, with endometriotic cysts typically appearing with high signal intensity on T1-weighted images and demonstrating “shading” on T2-weighted images, the ovaries are the most common sites affected, but endometriosis can also involve the gastrointestinal tract, urinary tract, chest, and soft tissues.

MR imaging is a useful modality as an adjunct to physical examination and transvaginal and transrectal sonography in evaluation of patients with

deep infiltrating endometriosis. MR imaging has high sensitivity, specificity, positive and negative predictive values, and accuracy in prediction of the locations and in evaluation of the extension of lesions in patients with this disease.

All the information offered by MR imaging is useful in planning the best treatment, surgical or medical, for the disease. Therefore, MR imaging may be recommended in preoperative assessment of patients with deep pelvic endometriosis.

MR is accurate for mapping of deep pelvic endometriosis, a disease frequently associated with significant clinical symptomatology. The imaging protocol includes “anatomical” T2W images as well as fat-suppressed T1W images. MR allows accurate presurgical mapping, but radiologists must remain alert because implants of endometriosis may have variable imaging appearances, involve multiple closely related anatomical structures and cause only subtle signal alterations. The use of an optimized imaging protocol combined with a careful review of the acquired imaging data usually allows appropriate surgical management, often the only therapeutic options able to improve the quality of life of severely afflicted patients.

MR imaging is increasingly used to determine preoperatively the presence and extent of posterior pelvis endometriosis. The technique is superior over TVU, as it is less operator-dependent and can provide more objective documentation.