



ROLE OF RECENT MRI MODALITIES IN ASSESSMENT OF PELVIC ENDOMETRIOSIS

Essay

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Of the Master Degree in Radiodiagnosis*

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Summary and Conclusion

Endometriosis is an important gynecologic disorder that is responsible for severe pelvic pain, for which surgery remains the best therapeutic option. Because successful treatment requires lesion removal with radical surgery, the accurate preoperative assessment of the extension of endometriotic disease is extremely important.

Peritoneal fibrotic nodules, ovarian cysts with old hemorrhagic content, and adhesions are the most representative findings of the disease.

Clinical evaluation and various sonographic approaches are not sufficiently sensitive to detect deep implants of endometriosis. Furthermore, exploratory laparoscopy is limited in demonstrating deep endometriotic lesions that may be hidden by adhesions or located in the subperitoneal space.

Pelvic MRI is a non invasive method with high spatial resolution that allows multiplanar evaluation and good tissue characterization, but without the use of ionizing radiation or iodinated contrast agents. MRI demonstrates 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 MRI is useful in planning the best treatment, surgical or medical, for the disease.



وَقُلْ اَعْمَلُوا فَسَيَرَى اللّٰهُ
عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ

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List of Abbreviations

Abbreviation	Name
ADC	Apparent Diffusion Coefficient
Cm	Centimeters
DCE	Dynamic Contrast Enhanced
DIE	Deep Infiltrating Endometriosis
DWI	Diffusion Weighted Imaging
Fig	Figure
FMS	Fibro-Muscular Stroma
FOV	Field Of View
H	Hydrogen
IV	Intravenous
Mm	Millimeters
MRI	Magnetic Resonance Imaging
NEX	Number of Excitation
NMV	Net Magnetization Vector
RF	Radio-Frequency
SNR	Signal to Noise Ratio
SWI	Susceptibility Weighted Imaging
1.5-T or 3-T	1.5 Tesla or 3-Tesla
TE	Time to Echo
TR	Time to Repetition
TSE	Turbo-Spin-Echo
US	Ultrasonography
USLs	Utero-Sacral-Ligaments
WI	Weighted Imaging

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