Radiology 2018: Imaging of ring enhancing brain lesions: A systematic approach and the impact of advanced imaging modalities- Heba Ibrahim Ali- Ain Shams University Specialized Hospital

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Ring-enhancing intracranial lesions are common and puzzling diagnostic dilemma and still a challenge to characterize even with the use of MRI. Routine brain MR imaging is very sensitive in the identification of ring enhancing lesions, but it lags some specificity, for instance it cannot distinguish between neoplastic and non-neoplastic lesions, in a large percentage of these cases. Frequently, the differentiation of a tumor from an infection is quite difficult, based solely on conventional MRI. Therefore, advanced MR techniques as proton Magnetic Resonance Spectroscopy (1H-MRS), Perfusion-weighted imaging and Diffusion Tractography Imaging (DTI) have been employed in the differential diagnosis of these lesions with variable success rates. The purpose of this presentation is establishing a systematic approach to examine intracranial ring enhancing lesions and to verify the role of advanced MRI techniques in the differential diagnosis.