

P307

Multiple Sclerosis in Emirati Population: Onset Disease Dissemination by Mr Imaging

Manzoor Ahmed¹, Ruqiyya Mir¹, Mustafa Shakra¹, Safana Al Fardan¹

¹Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates

²Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates

³Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates

Background: Multiple sclerosis is exploring new frontiers by virtue of our changing life styles and globalization. Arab world is rapidly developing the taste of this disease known to temperate climates and western world. Mr imaging plays an indispensable role as a diagnostic, monitoring and prognostic tool. Onset disease on mr imaging can be the window of opportunity to understand the magnitude of disease at its inception in teRMS of its latency as well as comparing with the established imaging stigmata.

Objectives: 1) to characterize onset of the disease on MRI and (2) to compare with the established patterns and distribution of disease.

Methods: This is a retrospective study using institutional electronic medical records. Selection criteria: A) 15 years or older emirati patients, b) clinically definite MS (CDMS), c) available diagnostic first MRI brain study. Contrast administration and MRI cervical or thoracic spine were optional. Board certified neuro-radiologist reviewed the images after age and gender characterization. Main items of image analysis were: A) zonal involvement according to mcdonald dissemination in space criteria (periventricular-1, subcortical/juxta-cortical or cortical-2, infratentorial-3 & spinal cord-4). B) brain or cord enhancing lesions according to mcdonald dissemination in time criteria and, c) segmentations of each zone specifically periventricular zone.

Results: Female was the dominant gender with a ratio of f:m= 1.9:1. All cases had 2 or more zones involvement except one case. More than 80% had at least 3 out of 4 zonal involvement. About 50% had all 4 zones affected. About 50% had enhancing lesions on presentation. Zone 1 was involved in all cases with 3 or more lesions in about 95% (as now required in updated mcdonald criteria). About 50% had more than 12 periventricular lesions.

Conclusions: Emirati MS patients present at a younger age with widely disseminated disease burden on MRI. However, the pattern of disease is similar to the known disease from the western world.