Posterior cortical atrophy

Panitha Jindahra*; Witaya Sungkarat

1Division of Neurology, Department of Medicine, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand
2Department of Radiology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

*Corresponding Author(s): Panitha Jindahra
Division of Neurology, Department of Medicine, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand
Tel: 0066-220-11-386;
Email: panitha.jin@mahidol.ac.th

Clinical image description

A 70-year-old right-handed female presented with slowly progressive blurred vision in the last four years. She had difficulty walking downstairs as each step appeared at the same level. The level of the steps became more apparent when applying color label tapes on the steps. She had difficulty walking in a crowd, finding an object on a table, and reading a book. She could not identify the level of water unless there were water ripples. Examinations showed corrected visual acuity of 20/30 on the right and 20/40 on the left. She could not read any Ishihara plates in both eyes but performed the Farnsworth D-15 color test relatively well. Computerized visual field tests revealed right incongruous homonymous hemianopia and left incomplete homonymous inferior quadrantanopia. By using Rama Motion Perimetry (https://rama.mahidol.ac.th/vrt/), motion perception of small targets was well preserved even in the blind areas with 90.4% correct scores while the scores of medium and large targets were 37.5% and 0%, respectively. The stimulus, a black dot moving in a circle, appeared randomly on a screen. The results suggested that the motion pathway has a different route from the retino-geniculo-cortical pathway. Visuospatial and visuoperceptual tasks were partially impaired. She could not read what she had written. Other ophthalmological, cognitive functions, and neurological examinations were unremarkable. Three-Dimensional Turbo Field Echo (3DTFE) Magnetic Resonance Imaging (MRI) demonstrated bilateral occipito-parietal and occipito-temporal atrophy. The atrophy was predominant on the left side (Figure 1). The clinical presentations fulfilled the criteria of posterior cortical atrophy [1]. She was prescribed an acetylcholinesterase inhibitor.

Figure 1: Axial 3DTFE MRI scans demonstrated bilateral occipito-parietal and occipito-temporal atrophy. The atrophy was predominant in the left parietal lobe.

Reference