

# Newly diagnosed Parkinson disease in middle aged cerebral palsy patient with schizencephaly

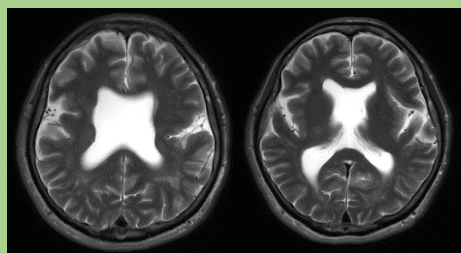
Seoyoung Mun, Eunseok Choi, Jungsoo Lee, Sangjee Lee\*.

Department of Rehabilitation Medicine, Daejeon St. Mary's hospital,  
College of Medicine, The Catholic University of Korea

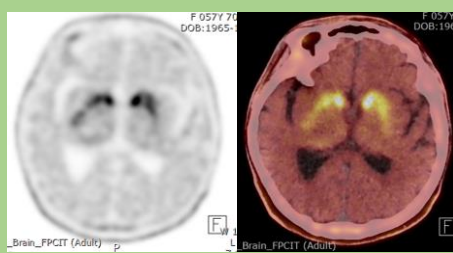
## CASE REPORT

A 55-year-old female, unilateral spastic cerebral palsy patient was admitted hospital due to progressive right arm and leg weakness (GMFCS4, MACS3, BMFM3a, CFCS4, GMFM 44.7%) for about 4 years. She could walk a few steps very slowly with flexed posture. Camptocormia was aggravated after fusion surgery for spondylolisthesis L4 on L5, at 3 years ago. She has got regular physical and occupational therapy after surgery. She denied any physical disability in housework or the vocational field, except mild weakness of the right hand and foot before symptom onset. Her speech was difficult to understand and drooling made her untidy. On physical examination, her back was so stiff to turn around or stand up promptly. MAS grade of hand and foot were 4 and they feel rigid. Brain MRI showed bilateral schizencephaly at both frontal lobes(Fig.1). The whole body spinal MRI showed degenerative change but no other reason for weakness. The electrodiagnostic study showed no peripheral lesions such as radiculopathy or mononeuropathy. MEP study showed delayed cortical latency recording at the right APB muscle. Medical treatments like baclofen, diazepam, anorex, tizanidine, and amantadine were tried but failed to show improvement. Botulinum toxin A for arm and bracing reduced spasticity for less than a month. Neurolysis for the hip adductor and equinus foot showed a temporary effect, also. Finally, trihexiphenidyl 3mg per day made a decrement in drooling and rigidity. FP-CIT-PET was prescribed to rule out parkinsonism, It signified the decrement of bilateral striatal dopamine transporters (DAT) binding especially posterior dorsal putamen(Fig.2). DYT1 and NGS for dystonia were all negative results. After taking Perkin 25-100mg 1t bid, trihexiphenidyl 1mg bid, freezing was much improved and finally she could cruise by herself with flexed posture and the amount of drooling was lessened, too.

**Figure 1. Brain MRI showed Schizencephaly**



**Figure 2. FP-CIT-PET**



## CONCLUSION

5 years have passed until the tentative diagnosis. Even though the cerebral palsy patient said that she had been doing so well, before. Newly onset rigidity combined with progressive loss of function needs specific exams like FP-CIT-PET scan with child onset neurologic disease. We report a case of the anticholinergic drug improved symptoms of rigidity and bradykinesia in Parkinson's disease patient with cerebral palsy with schizencephaly.