

Isolated choroid plexus infarction presenting as acute-onset Parkinsonism

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An isolated choroid plexus infarction presenting as acute-onset Parkinsonism has never been reported. A 70-year-old woman with a history of hypertension and hyperlipidemia visited our clinic complaining of sudden gait disturbance and bradykinesia, which started 10 days prior. On neurological examination, the patient's gait showed a decrease in step height and walking speed. Symmetrical bradykinesia of the upper and lower limbs was also observed. Secondary Parkinsonism was suspected, and a laboratory and imaging diagnostic workup was performed. Interestingly, her brain MRI demonstrated a focal hyperintense lesion in the right choroid plexus on diffusion-weighted imaging. The above lesion was confirmed to be an acute ischemic stroke based on low signal intensity on the apparent diffusion coefficient map. To differentiate the patient's symptoms of acute-onset Parkinsonism from CSF circulation disorders or underlying cerebral dopamine depletion, a diagnostic lumbar puncture and 18F-FP-CIT PET scan were performed. Opening CSF pressure was 56mmH₂O, which was lower than normal range. A 18F-FP-CIT PET scan revealed normal dopamine transporter binding. Seven weeks after the onset of symptoms, she had noticeable recovery with no symptoms of Parkinsonism. Follow-up lumbar puncture revealed a normal opening pressure. We speculated that acute-onset Parkinsonism in this case might be related with low CSF pressure syndromes such as intracranial hypotension. Considering the course of recovery for seven weeks after the onset of symptoms, we suggested that the patient's Parkinsonism was due to choroid plexus infarction. Clinicians should be aware of this unique condition as a rare cause of secondary Parkinsonism.