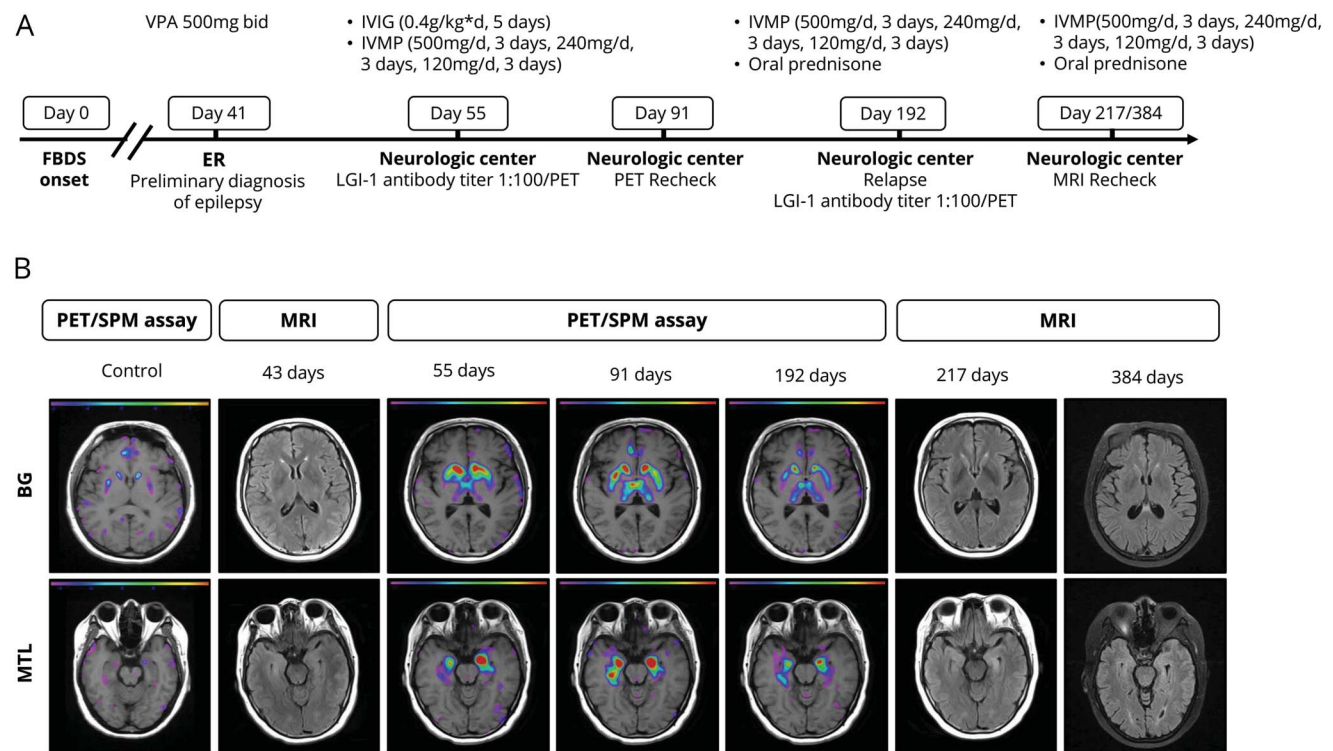


Teaching NeuroImages: ^{18}F -FDG-PET/SPM analysis in 3 different stages from a patient with LGI-1 autoimmune encephalitis

Wei Shan, MD, PhD, Xiao Liu, MS, and Qun Wang, MD, PhD

Neurology® 2019;93:e1917-e1918. doi:10.1212/WNL.00000000000008473**Correspondence**Dr. Qun
wangq@ccmu.edu.cn**Figure** ^{18}F -FDG-PET/SPM follow-up study for patient with LGI-1 with faciobrachial dystonic seizures (FBDS)

(A) Sequence of events after the patient's FBDS symptoms appeared. (B) Representative MRI and ^{18}F -FDG-PET/SPM ($p < 0.01$) image in 3 different time stages from admission diagnosis, relapse, discharge, and review. BG = basal ganglia; IVIG = IV immunoglobulin; IVMP = IV methylprednisolone; MTL = medial temporal lobe; VPA = valproate.

A 50-year-old woman presented with faciobrachial dystonic seizures for about 50 days during sleeping (figure, A). Initial MRI scan was normal, but FDG-PET showed hypermetabolism in the basal ganglia (BG) and medial temporal lobes (MTLs) (figure, B). Clinical symptoms raised a strong suspicion of LGI-1 autoimmune encephalitis (AE) diagnosis, and LGI-1 antibody titer examination (serum and CSF) confirmed the suspicion.^{1,2} After relapse, the patient showed a previous PET abnormal pattern.

Early diagnosis of LGI-1 AE is necessary for further treatment.² Abnormal metabolic changes of PET in BG and MTL appeared earlier than in MRI.

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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Name	Location	Role	Contribution
Wei Shan, MD, PhD	Beijing Tiantan Hospital, Capital Medical School	Author	Designed and conceptualized the study, analyzed the data, drafted the manuscript for intellectual content

Appendix (continued)

Name	Location	Role	Contribution
Xiao Liu, MS	Beijing Tiantan Hospital, Capital Medical School	Author	Data collection
Qun Wang, MD, PhD	Beijing Tiantan Hospital, Capital Medical School	Principal investigator	Reviewed all protocol and subject deviations

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