

Supplementary Materials:

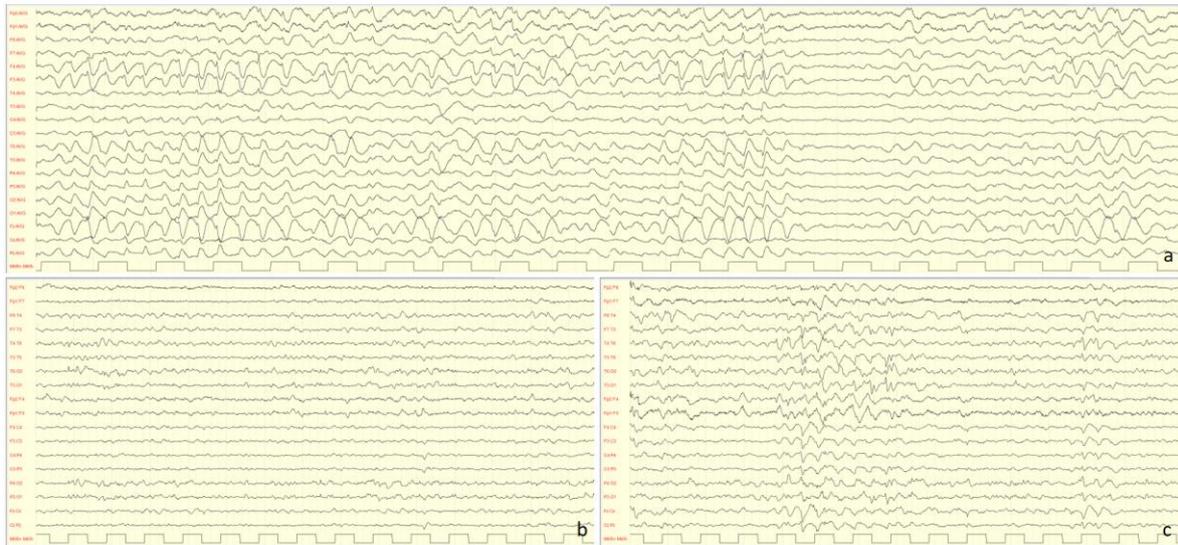


Figure S1. Electroencephalography of patient #1. (a) EEG performed at the age of 22, showing high amplitude and diffuse spike and slow-wave discharges that were more evident over the frontal areas. (b) EEG of patient #1 performed at the age of 42 years old, showing a dominant theta (6-7 Hz) background activity and (c) high voltage delta discharges intermixed with epileptiform spikes and polyspike-wave discharges over the temporal areas.

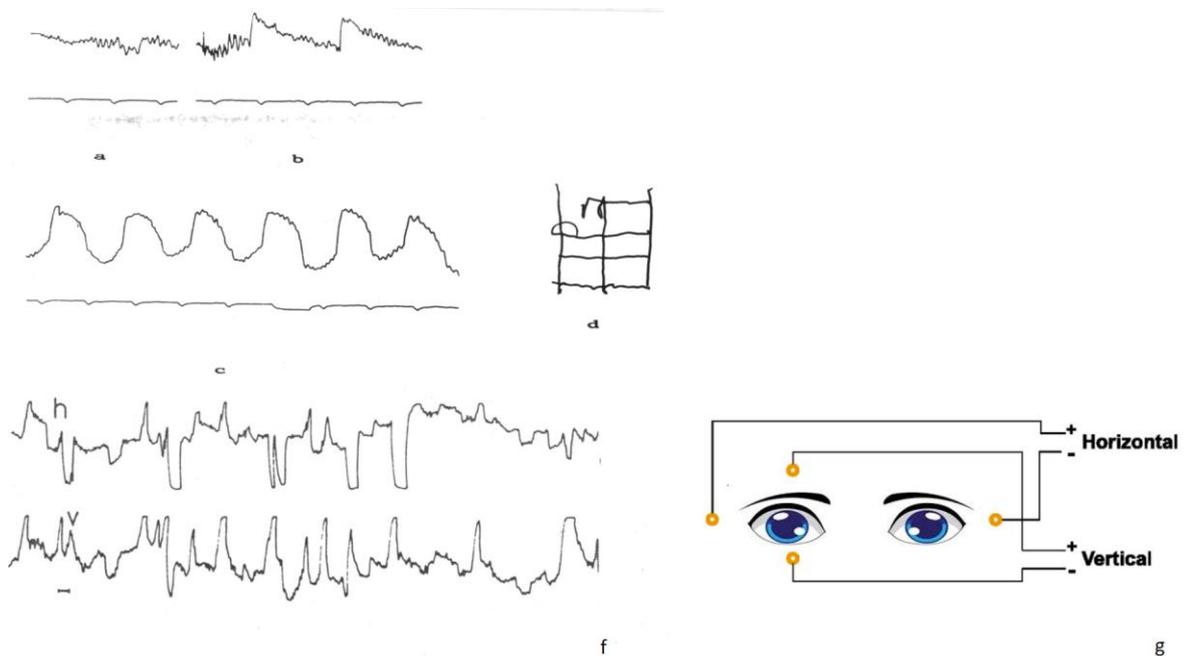


Figure S2. Electrooculography of patient #1. Electrooculography performed at the age of 15, showing a broad flutter in primary eye position consistent with oscillopsia (a); hypermetric saccades intermixed with flutter, consistent with pendular nystagmus (b); slow eye movement with superimposed flutter (c). (d) The image shows tremor at the graphic task at the same age. (f) Electrooculography (top trace h: horizontal; bottom trace v: vertical; electrodes are placed as shown in image (g)) performed at the age of 21 and showing continuous high amplitude multidirectional saccades (eye dancing) consistent with opsoclonus.