Supporting Information, Table S1. Changes of MRI findings and clinical deteriorations.

Age months)	Major changes of MRI findings	Clinical signs
14	Diffuse hyperintensity in most parts of cerebral WM on T2W and FLAIR. Cerebellar WM was isointense on T2W and FLAIR. Diffuse hyperintensity in the brain stem on T2W and FLAIR.	Intention tremor of the head, ataxia, falling. Menace reaction absent bilaterally, but the dog would chase dropping cotton and had intact visual placing responses.
17	Diffuse hyperintensity of cerebral WM on T2W and FLAIR extending into the whole cerebrum. Bilateral hyperintense lesions in the cerebellar nucleus on T2W and FLAIR. Brain atrophy.	Worsened intentional head tremor and tended to show generalized tremor. Hypermetria in left thoracic limb, cerebellar ataxia, occasional falling.
18-20	Progress of brain atrophy, mainly in the cerebrum and cerebellum.	Hypermetria progressed and knuckling was observed in all limbs. Positional strabismus (18 month) and blindness (20 month). Frequently falling due to severe generalized tremor. Good appetite and response to owner.
21	Hyperintensity around the interthalamic adhesion and cerebellar WM on T2W and FLAIR.	Reluctant to move, generally in prone position. Difficulty in standing. Good appetite and response to owner.
22-24	Progress of brain atrophy, mainly in the cerebrum and cerebellum.	Remained in prone position. All four limbs could be consciously moved but could not walk. Muscle atrophy in all four limbs. Appetite decreased slightly and frequently dropping food.
25, 26	Bilateral hyperintense lesions in the medial geniculate nucleus of the thalamus on T2W and FLAIR.	Tending to remain in lateral recumbency Decreased response to environment and owner. Depressed mental status.
28	Progress of brain atrophy, mainly in the cerebrum and cerebellum.	Rigid in all four limbs, variable appetite, slight weight loss. Decreased response to owner.
34	Cerebral WM showed greater hyperintensity on T2W and FLAIR. Some areas of cerebral WM in the left frontal and piriform lobe showed prominent hyperintensity on T2W, but hypointense on T1W and FLAIR. Brain atrophy, mainly in the brain stem and spinal cord.	Onset of epilepsy (controlled with zonisamide 5mg/kg twice per day). No response to environment and owner. Body weight maintained from 28 month of age by enforced feeding by owner.
36	Brain atrophy, mainly in the brain stem and spinal cord.	No clinical deterioration and no weight loss.