

**Supplementary Table 2.** Summary of clinical details derived from cases with primary vasculitis of the central nervous system.

Case	Age	Sex	Breed	Clinical signs	Laboratory tests	Imaging findings	Pathological description	Treatment	Outcome
1	9 yr	FS	Boxer	Reluctance to walk; pain on standing and walking; vocalization; proprioceptive deficits in multiple limbs; head tilt; ataxia; spinal hyperesthesia.	Hematology and biochemistry unremarkable. <i>Toxoplasma gondii</i> , <i>Neospora caninum</i> , <i>Ehrlichia canis</i> , <i>Leishmania</i> spp., and <i>Babesia canis</i> serology negative. CSF: mixed cell inflammatory pleocytosis. Coagulation times within normal limits.	Thoracic radiographs and abdominal ultrasound unremarkable. MRI suggestive of leptomeningitis.	All parts of brain and spinal cord affected. Circular fibrinoid change with neutrophilic infiltrate in small diameter vessels.	Prednisolone, clindamycin, infusion of cytosine arabinoside.	Euthanized 9 days after presentation.
2	1 yr, 2 mo	FS	Miniature Schnauzer	Vomiting; flaccid paralysis; absent spinal reflexes of all 4 limbs.	Hematology and biochemistry unremarkable. Acetylcholine receptor antibody titer negative. <i>Toxoplasma gondii</i> and <i>Neospora caninum</i> serology and CSF PCR negative. CSF: unremarkable.	Thoracic radiographs unremarkable.	Segmental vasculitis of the ventral spinal artery branches with a mononuclear infiltrate.	None.	Cardio-respiratory arrest following rhabdomyolysis under general anesthesia.
3	10 yr, 4 mo	MI	Lurcher	Acute collapse; seizures; obtundation; hemiparesis; head tilt and turn; nystagmus; anisocoria.	Hematology and biochemistry unremarkable.	Thoracic radiographs unremarkable. Ultrasonography revealed possible cerebellar herniation.	Brainstem: neutrophilic inflammatory reaction in dorsal midline, with fibrinoid change of vessel walls. Infarcts of the heart and kidneys.	Mannitol infusion.	Euthanized after hospitalized for 2 days.

4	1 yr, 7 mo	FI	X	Pyrexia; ataxia; recumbency; depression; collapse; obtundation; head turn; absent postural reactions in all 4 limbs.	Hematology unremarkable. Serum biochemistry: increased CK activity. CSF: marked mononuclear pleocytosis.	NA.	Fibrinoid change of vessel walls in white matter tracts of the brain and spinal cord. Neutrophilic and mononuclear cell infiltrate.	Dexamethasone, clindamycin, mannitol and hypertonic saline infusions, furosemide.	Died within 24 hr of hospitalization.
5	2 yr, 10 mo	FS	Weimaraner	Pelvic limb ataxia and paraparesis. Lumbar spinal hyperesthesia.	Hematology and biochemistry unremarkable. CSF: mixed pleocytosis (predominantly neutrophilic and macrophagic). Synovial fluid: neutrophilic arthritis of 2 joints. PCR for <i>Toxoplasma gondii</i> , <i>Neospora caninum</i> , <i>Borrelia burgdorferi</i> , and <i>Ehrlichia canis</i> negative.	NA.	Fibrinoid change of leptomeningeal blood vessels. Infiltration of the choroid plexus stroma and leptomeninges of brain and spinal cord by lymphocytes, macrophages, and neutrophils.	Cytosine arabinoside infusion, dexamethasone.	Euthanized after hospitalized for 3 days.
6	8 mo	MI	Weimaraner	Cervical pain and right thoracic limb lameness following trauma. Lethargy; depression; stiffness.	Hematology: neutrophilia. Biochemistry unremarkable. Coagulation times normal. CSF unremarkable.	NA.	Severe necrotizing vasculitis with fibrinoid change of the walls of 2 medium to small arteries in the ventral cervical spinal cord, and throughout meninges.	Carprofen, morphine, diazepam.	Euthanized after hospitalized for 3 days.

\* FS = female, spayed; FI = female, intact; MI = male, intact; CSF = cerebrospinal fluid; MRI = magnetic resonance imaging; PCR = polymerase chain reaction; NA = not applicable.