



Date: 17/10/2019

Referring veterinary surgeon: [REDACTED]

Hospital: [REDACTED]

Email address: [REDACTED]

Patient name and surname: [REDACTED]

Species (canine/feline): Dog Breed: Retriever - Labrador Age: 00y 04m Sex: Male

Body areas scanned and charged: MRI brain Service required: Standard 1-3 days

Relevant clinical history, clinical findings and diagnostic test results:

Adopted at 8 weeks of age, always been clumsy and from time to time bumping into things. Recently fluctuating but progressively worsening of gait, losing trained habits, changes in behavior (more and more subdued), more and more circling to the left. Physical exam: normal. Neuro exam: absent proprioception on R side, normal left. Very quiet puppy. Obvious circling to the left, walking otherwise quite ok. Menace inconsistent in both eyes. Bloods unremarkable. CSF: mild neutrophilic pleocytosis (14 cells/microL, 70% neutrophils, proteins pending). CSF PCRs sent off for infectious diseases.

Report

Thank you for submitting this MR study of the brain on [REDACTED].

Main findings

There is marked dilation of the lateral and third ventricles associated with periventricular FLAIR hyperintensity. The third ventricle is extending dorso-caudally in the quadrigeminal cistern causing caudal deviation of the tentorium cerebelli (images 1 & 2). A large cystic lesion is present between the tentorium cerebelli, rostral cerebellum and rostral brainstem. The latter two are markedly compressed as a result of the presence of this cystic lesion with FLAIR hyperintensity of the dorsal brainstem at its periphery. The cerebellum is severely displaced caudally and mildly herniating through the foramen magnum. There is diffuse T2W hyperintensity of the dorsal part of the cervical spinal cord on sagittal image (image 1). No abnormal contrast enhancement is present on this study.

Conclusion & recommendations

- Suspected intracranial intra-arachnoid diverticulae in the caudal fossa with secondary obstructive hydrocephalus and cervical syringomyelia

Although CSF is mildly inflammatory, the changes (mild neutrophilic pleocytosis) may be secondary to the above disease process as opposed to represent a primary inflammatory disease. Treatment of such condition can be challenging with uncertain outcome but ultimately would require placement of ventriculo-peritoneal shunt in each lateral ventricle and lateral fenestration (or shunting as well) of the suspected arachnoid diverticulae via combined rostro-tentorial and trans-occipital craniectomy with transverse sinus occlusion.

I hope this report is helpful. Do not hesitate to contact me if I can be of any further help.

Best regards

Laurent Garosi
DVM, FRCVS, Dip ECVN
RCVS & EBVS® European Specialist in Veterinary Neurology



Image 1 – Sag T2W brain and cranial cervical



Image 2 – Trv T2W (left) and FLAIR (right) cranial medulla oblongata