



Date: [REDACTED]

Referring veterinary surgeon: [REDACTED]

Hospital: [REDACTED]

Email address [REDACTED]

Patient name and surname: [REDACTED]

Species (canine/feline): Feline

Breed: Himalayan

Age: 7

Sex: FN

Body areas scanned and charged: Brain, cervical spine

Service required: Standard 1-3 days

Relevant clinical history, clinical findings and diagnostic test results:

Seizures since July 2019. Frequency increasing. Episodes start after biting tail. On Pexion 50mg am - 100 mg pm. Keppra 20mg/Kg bid.

Report

Thank you for submitting this MR study of the brain and cervical spinal cord on [REDACTED].

Main findings

There are a number of abnormalities on this study:

- Dilation of the left lateral ventricle (image 1)
- Reduction of the skull length with the chonchal bones being pushed toward the cranial cavity and compression of the frontal lobe (image 2)
- Large supracollicular fluid accumulation causing rostral displacement and compression of the occipital lobes and caudoventral displacement and severe compression of the cerebellum (image 2 – green arrow)
- Herniation of the caudo-ventral cerebellar vermis through the foramen magnum (image 3 - blue and purple arrow)
- Severe syringomyelia extending the whole length of the cervical spinal cord and particularly marked between C2 and C5 where the syrinx width occupies up to 80% of the vertebral canal diameter (image 4)
- Enlargement of the vertebral canal diameter at C2 (image 2 – orange arrow)
- Suspected atlanto-occipital overlap with the cranial margin of the arch of the atlas displaced cranial to the foramen magnum (image 2 – yellow arrow)

Conclusion & recommendations

The above findings represent a feline form of craniosynostosis (abnormal growth of the skull) and have been reported in Peke-face Persian phenotype who suffer from high grade brachycephaly. The reported clinical signs are likely related to severe syringomyelia as seen in CKCS with Chiari-like malformation and syringomyelia. Considering the severity of the congenital/developmental skull and brain abnormalities, the prognosis to achieve remission of the presenting signs here is guarded. There is also a non-negligible possibility here of progression of neurological signs with progressive ataxia and tetraparesis. I would suggest trying in the first place [REDACTED] on oral prednisolone 0.5 mg/kg twice daily for

an initial 2 weeks period in combination with oral gabapentin 10-15 mg/kg twice daily as neuropathic pain killer. I would suggest slowly taking [REDACTED] off pexion by reducing to 50 mg twice daily for 5 days then 50 mg once daily (AM) for 5 days then stop as well as doing the same with levetiracetam over a 10-day period as well. In case of failure to respond to oral prednisolone and gabapentin after 12 days, we can look at other treatment options however in view of the severity of the imaging findings, I would be concerned it may be difficult achieving good results with medical management. Surgery (placement of a shunt in the supracollicular fluid accumulation) would be the next step in case of failure of medical management with I am afraid an uncertain prognosis here in view of the severity of the syringomyelia. Please let me know how [REDACTED] is doing 12 days after starting the above treatment regimen.

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

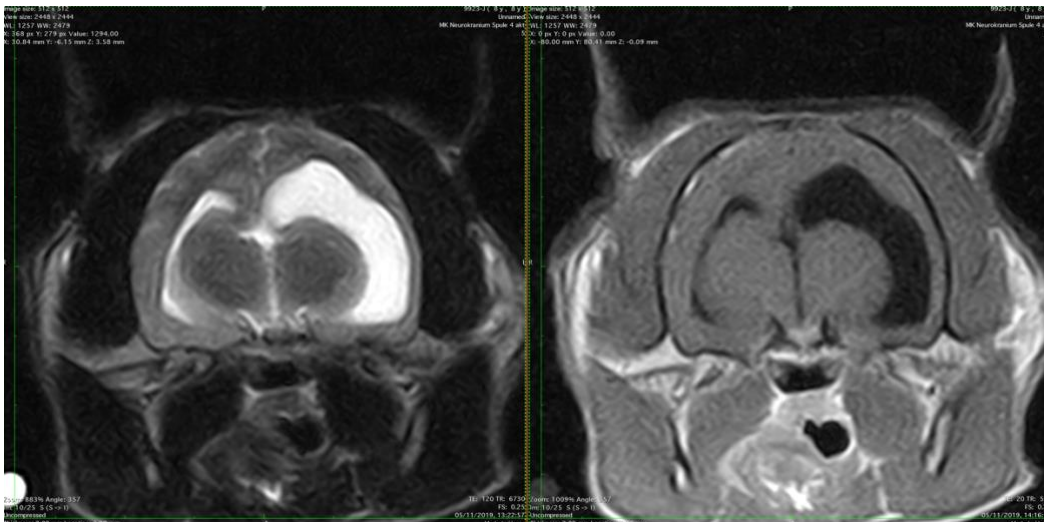


Image 1 – Trv T2W (left) and T1Wc (right) thalamus

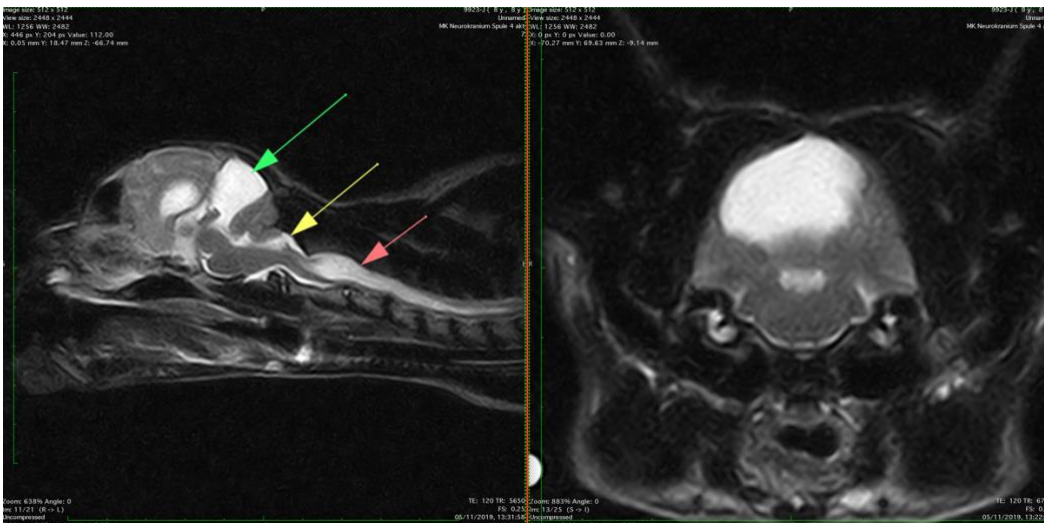


Image 2 – Sag T2W brain and neck (left) and Trv T2W caudal fossa (right)

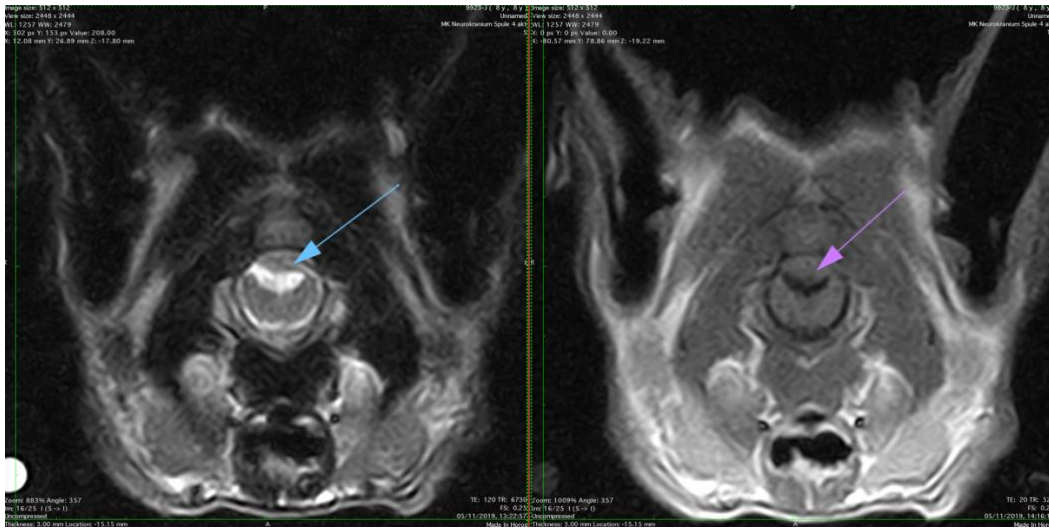


Image 3 – Trv T2W (left) and T1Wc (right) foramen magnum

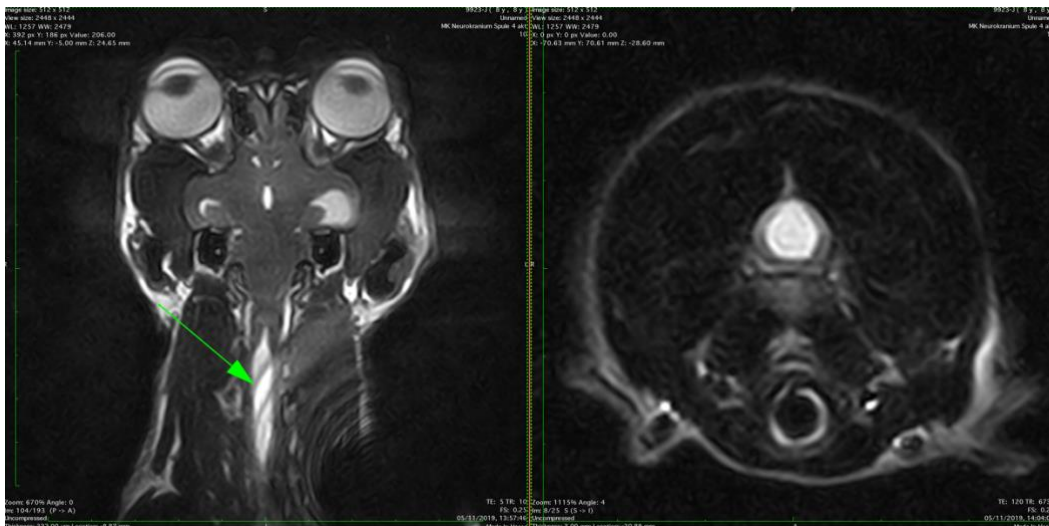


Image 4 – Dors T2W brain and cranial cervical (left) and Trv T2W C2 (right)