

Cavalier King Charles Spaniel MRI evaluation report

Pedigree name: **Liane's Hold Me Forever**

Registration number: **VDH-VK 19.0750**
Microchip number: **276093400844694**
Date of the MRI scan: **23-11-2020**
Age at scanning: **1,54 years**

Gender: **Female**
Colour: **Tricolour**
Date of birth: **10-5-2019**

Extra information concerning the MRI scan. This information is additional information and could be of use for breeding selection.

*Utrecht grading of the herniation is grade **1** and the shape of the cerebellum get grade **0***

Chiari malformation grading	Shape
0 = grade 0	0 = not abnormal
1 = grade 1 as the UK system	1 = the cerebellum is clover leaf shaped
2 = grade 2 as the UK system	2 = the cerebellum is flattened at the front side
3 = grade 2 and added to this the herniation and indentation is clearly visible	3 = the cerebellum is flattened at the hind side
4 = grade 2 and added to this the herniation and indentation is severe	4 = Subtentorial herniation is seen
	5 = Abnormal shape not listed above

Utrecht information concerning the spinal cord:

The visibility of the central canal on the sagittal T2 weighted and transverse T1 weighted images gets grade **0**, whereas the sagittal T1 weighted images gets grade **0**. The shape of the dilatation or syrinx gets grade **0**. We could see the central canal according to grade **0**. The maximum internal diameter of the dilatation measures **0** mm. The Belgium classification is **Categorie 1**

Visibility sagittal T2 & transversal T1	Visibility sagittal T1	Shape of the central canal or the syrinx	Visible from ... To ...	Diameter in millimetres
0 = not visible	0 = not visible on T1	0 = not or circular	0 = not visible	
1 = visible sagittal T2	1 = visible on the T1 sagittal	1 = presyrinx	1 = sagittal T1 from to	
2 = visible S-T2 en TV T1		2 = CC open to dorsal	2 = sagittal T2 from to	
3 = visible 1-2 mm TV T1		3 = CK asymmetrical to aside		
4 = visible 2-3 mm TV T1		4 = separate syrinx		
5 = visible 3-4 mm TV T1				
6 = visible > 4 mm TV T1				

Perviously used UK classification: **C**

Concerning (microchip) artefacts the grading is **1**.

Signed by

Dr. Paul Mandigers

DVM, PhD, Diplomate ECVN
Diplomate RNVMA Internal Medicine
European Specialist Veterinary Neurology EB



Cavalier King Charles Spaniel MRI evaluation report

Pedigree name: **Liane's Hold Me Forever**

Registration number: **VDH-VK 19.0750**
Microchip number: **276093400844694**
Date of the MRI scan: **23-11-2020**
Age at scanning: **1,54 years**

Gender: **Female**
Colour: **Tricolour**
Date of birth: **10-5-2019**

According to the submission form there were no neurological signs.

Age category:

C

Based on the MRI scan send in the following grading is applicable:

Dutch Kennelclub / CCN / BVA / Kennelclub grading: **CM Grade 1c / SM Grade 0c**

Explanation:

CM grade 0	No herniation cerebellum	SM grade 0	No dilatation of the central canal or syrinx visible
CM grade 1	Herniation of the cerebellum but with minimal blockage of the CSF flow	SM grade 1	Dilatation of the central canal up to 2 mm
CM grade 2	Herniation of the cerebellum and with complete blockage of the CSF flow	SM grade 2	Dilatation of the central canal of 2 mm or more, or a syrinx is visible.

Additional information on the ventricular system get grade **0**. The middle ear on the left side showed **0** and the middle ear on the right side **0**.

Concerning (microchip) artefacts the grading is **1**. Any grading above 1 means that the quality of the scan is of such a quality that the final result could not be estimated and that the current grading could be an underestimate of the real situation.

Explanation:

Ventricular system	Artefacts?	Middle ear
0 = no abnormalities	0 = none	0 = not visible
1 = dilatation of the 4th ventricle	1 = not severe	1 = only a limited amount of material is visible
2 = mild dilatation	2 = too severe to evaluate	2 = there is material visible
3 = severe dilatation of the ventricles		3 = the bullae are completely filled with material

Signed by

Dr. Paul Mandigers

DVM, PhD, Diplomate ECVN
Diplomate RNVN Internal Medicine
European Specialist Veterinary Neurology EBVS

