

Proposed BVA KC Syringomyelia MRI screening scheme

SUMMARY

Members of Panel

Members of the panel must be board certified in neurology or radiology and have the capacity to read DICOM images i.e. have E Film™ or similar

Certification

Breeders will receive a YES / NO answer on whether the dog has central canal dilatation or syringomyelia

If the dog has a syringomyelia then certificate will also detail the maximum transverse width of the syrinx on a T1W image cranial to the C4-5 disc space

Imaging

The minimum required images are

1) Sagittal T1W from intra thalamic adhesion to as far caudal as possible – **The images must include a mid sagittal section of spinal cord visible in one section from the cisterna magna to the C4/C5 intervertebral disc space.**

If this cannot be achieved because the dog has scoliosis secondary to syringomyelia then a dorsal image of the spinal cord must be included.

2) Sagittal T2W as above

3) T1W Transverse images though the maximum width of the syrinx if there is SM or as a block centred on C2/C3 and extending from at least mid point of the vertebral body of C2 and reaching the mid point of the vertebral body of C3

Identification of dogs and labeling of images

Dogs presented for scanning must have permanent identification in the form of microchip / tattoo and Kennel Club Registration number

The microchip / tattoo and the Kennel Club Registration number together with the name, sex, breed and date of birth should be incorporated onto the DICOM images.

Age of dogs

The wording of the certificate will clearly state that this is the MRI status of the dog at the current time and that the situation may change

The minimum screening age is 12 months

It is also recommended that breeders determine the MRI status of their breeding stock at 2-3 years and again when 6 years of age. This will provide further information about that individual dog's estimated breeding value EBV (and therefore the EBV of that individual dog's offspring)

Proposed Procedure

DICOM files on a CD are submitted together with the appropriate documentation to the BVA

BVA will check documentation and DICOM images before sending on to 2 members of the panel.

Those 2 panel members will reach a consensus decision – if they disagree then the images will be referred to the arbitrator.

Results are submitted to the BVA

Certificate is issued to the owner

Results are submitted to the Kennel Club and can be accessed by appropriate individuals e.g. Canine Genetics Unit at the Animal Health Trust

Appeals will be submitted to the arbitrator of the panel

Procedure for non-diagnostic images

An image is designated non-diagnostic by a consensus opinion from the 2 panel members.

In the case of conflict (i.e. one panel member considers acceptable and the other not) then the arbitrator will make the final decision

If images are non-diagnostic then the veterinarian concerned will be informed in writing as to why the images are unacceptable, together with constructive advice for improving them.

Inclusion of breeds other than CKCS

This scheme is not breed specific i.e. any breeder may participate providing the dog has permanent identification in the form of tattoo or microchip.

Inclusion of dogs from other countries

This scheme is also not limited to the UK i.e. images and appropriate documentation may also be submitted from other countries

Dogs scanned before the scheme comes into effect

Breeders are encouraged to submit result certificates for SM and mitral valve dysplasia, together with the Kennel Club registered name and number of the dog or a 5-generation pedigree to Dr Sarah Blott, CKCS Health Breeding Programme, Animal Health Trust, Lanwades Park, Kentford, Newmarket, Suffolk CB8 7UU. PDF copies of the certificates can also be sent to sarah.blott@aht.org.uk

It is likely that it will be many months before an official scheme can be started. This is because of the lengthy consultation and preparation process that is involved.

Prior to the scheme coming into effect it is recommend that from **January 2009**

- 1) The approved protocols for imaging are followed – this will include permanent identification of dogs with microchip or tattoo
- 2) That the images are reviewed by a board certified radiologist or neurologist.