

## **International Syringomyelia Conference Nov 2006**

### **Revised CKCS MRI screening and breeding recommendations**

These breeding recommendations are made using current information and in response to CKCS breeder request for guidelines. It has yet to be proven if this guide is appropriate. The aim of these recommendations is to reduce the incidence of symptomatic syringomyelia (SM) in the breed not to create litters of puppies guaranteed not to have SM as the chance of producing an affected dog cannot be predicted without knowing the inheritance.

#### **Notes**

The age cut off at 2.5years has been decided so as to tie in with MVD recommendations and because most dogs with symptomatic SM will show signs before 3 years of age.

The following categories from the previous guidelines have been removed because of difficulty in accurately interpreting

Previously A \* - now A

Previously B – now C

#### **It is recommended**

- 1) That both the sire and the dam of a proposed mating are screened (any unscreened dog should be assumed to be "D")
- 2) Offspring of any mating should also be MRI screened before breeding.
- 3) Any dog screened before 2.5 years old has a second screen when older,
- 4) That dogs are screened from 6 months of age
- 5) That if a limited ("mini" ) MRI screen is performed that
  - a) the minimum area covered is from approximately the level of the thalamus / corpus callosum to cervical vertebrae 5 (C5)
  - b) Both TW1 and TW2 = sagittal images are obtained in addition to TW1 and /or TW2 transverse images through the upper cervical spinal cord.
  - c) An assessment is also made for presence/absence of ear disease and ventricular enlargement.
- 6) That interpretation of images is made by Diplomate level radiologists, neurologists and, in special circumstances, by orthopaedic surgeons with recognised expertise in this area.

<b>GRADE</b>	<b>AGE (YEARS)</b>	<b>SYRINGOMYELIA</b>	<b>BREED TO</b>
<b>A</b>	<b>Over 2.5</b>	<b>Absent or less than 2mm central canal dilatation in the C2-C4 region only</b>	<b>A, C, D</b>
<b>C</b>	<b>Under 2.5</b>	<b>Absent</b>	<b>A</b> Re scan after 2.5years
<b>D</b>	<b>Over 2.5</b>	<b>Present but asymptomatic</b>	<b>A</b>
<b>E</b>	<b>Under 2.5</b>	<b>Present but asymptomatic</b>	<b>NO</b>
<b>F</b>	<b>Any</b>	<b>Present and symptomatic</b>	<b>NO</b>