



TWELVE YEARS OF CHIARI-LIKE MALFORMATION AND SYRINGOMYELIA SCANNING IN CAVALIER KING CHARLES SPANIELS IN THE NETHERLANDS: CAN WE GET AWAY FROM IT?

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Introduction

Chiari-like malformation (CM) and syringomyelia (SM) are two conditions that frequently occur in Cavalier King Charles Spaniels. Both conditions are currently screened in the Netherlands prior to breeding, and are graded according to the British Veterinary Association/Kennel Club scheme.

Aim of the study

To study the prevalence, effect of 12 years of selection, and estimate the heritability for CM and SM from 12 years of screening results. Furthermore to assess the presence of primary secretory otitis media, and chip artefacts.

Results

About 1249 screening results were re-evaluated. Results indicated an overall presence of CM in all dogs, suggesting it has become a breed-specific characteristic. SM was absent in 61% of the dogs, and a clear age effect was demonstrated, with SM increasing over time. This emphasizes the importance of screening at appropriate age, since SM can worsen over time. The presence of middle ear effusion in this study was 19% - 21% for dogs younger than 3 years, and 32% - 38% for dogs older than 3 years. In as much as 60%, chip artefacts were noticed, leading to the recommendation to another place for the microchip in breeds that are susceptible for developing SM. Lastly, this study estimated the heritability of SM at 0.30 for the central canal dilatation, compared to 0.13 for the classical BVA/KC method, using a model including the age effect and the interaction effect between veterinary and animal clinic.

Conclusion

As a conclusion, screening for SM in the entire population should be maintained, and a selection scheme against SM should be based on EBVs rather than phenotypic selection.

References

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