

CONTROL OF INHERITED MITRAL VALVE DISEASE IN CAVALIER KING CHARLES SPANIELS IN THE UK

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Mitral valve disease is recognised to be common and important in Cavalier King Charles Spaniel dogs. Surveys in several countries have demonstrated a high frequency, with the prevalence increasing with age. One study from Sweden has demonstrated that the prevalence of murmurs was lower in the offspring of animals with a late onset of mitral valve murmurs compared with the offspring of dogs with early onset murmurs.

The Cavalier King Charles Spaniel breed club in the UK have been publishing a list of animals which have been auscultated by veterinarians and certified as being unaffected by a mitral valve murmur, although submission of the results by the owner is voluntary. The programme has been running since 1992 and data from 7,323 examinations have been recorded. The society currently recommends that animals should be screened every year and that only animals without a murmur at the age of 2.5 years or older and additionally whose parents have no murmur at the age of 5 years or older should be used for breeding. The objectives of our study were to use the data to determine the age and sex specific prevalence of the condition and to assess the benefits of the recommended breeding programme.

Data were entered into a custom designed relational database (Fox Pro) by the breed society. The Kennel Club provided electronic pedigree data, which included sex and date of birth. The two databases were merged, variables representing age specific status developed and relational facilities were used to develop variables representing age specific status of parents. Data were analysed using standard methods for categorical data.

The prevalence and incidence increased with the age of dog in this screened population in the United Kingdom. The age specific prevalence in these screened dogs was 9.7% at 5 years and 42.5% at 10 years. No sex differences were apparent. The prevalence was several times and significantly higher in the offspring of dogs and bitches affected (compared with the offspring from healthy parents) at almost every combination of offspring and parental age. The crude prevalence of the condition was much lower in this population than in other reported studies. However owners may be less likely to report results from affected animals or may report them only once, thus biasing the study population away from affected animals in older age groups. The cumulative prevalence in this population, estimated with assumptions about survival after diagnosis of a murmur, was much closer to the age specific prevalence reported from other studies.