

Glaucoma in Border collies

Glaucoma was rarely reported in Border collies until recently. Four related cases were known in Australia prior to 2000 that resulted in eye loss, including a parent and offspring. In the last few years a number of serious cases have identified in UK and all are related to a champion affected dog that is related back to the Australian cases. This has alarmed breeders and driven them to look for solutions to the problem. Because of our previous research on diseases in Border collies we have a close association with breeders and clubs and were consulted about possible courses of action. Breeders in UK through Pastoral Breeds Health Foundation (PBHF) have set up a database for reporting cases. They have organised workshops with veterinary ophthalmologists to ensure consistency of classification of disease severity. They have run clinics to collect samples for future glaucoma research.

Glaucoma is a slowly progressive disease with severity varying from extremely high, blindness or eye removal (Grade 5 disease according to scale developed by UK ophthalmologist Peter Bedford) to quite low, changes in structures of the eye to narrow angles that may result in increased pressure in future (Grade 1). Grade 1 are structural differences in the eye referred to as Goniodysgenesis and can only be detected by Gonioscopy eye examination. Of the 83 affected cases on the PBHF Border Collie Goniodysgenesis Database (BCGD <http://bc-glaucomadatabase.synthasite.com/>), 12 are severely affected or grade 5, and another 11 are moderately affected (grade 4 or 3). The remaining 60 are mildly affected or Grades 1 or 2 and might never develop glaucoma symptoms.

Written by Alan Wilton on behalf of the PBHF for the submission to the Kennel Club