

WELSH SPRINGER SPANIEL GLAUCOMA SURVEY

ANIMAL HEALTH TRUST, NEWMARKET

Since July 1996, 119 dogs have been examined at the Animal Health Trust and at Welsh Springer Spaniel shows. These examinations have involved the measurement of intraocular pressure (usually raised in clinical glaucoma), gonioscopy (examination of the drainage angle, as is performed under the BVA eye test) and ultrasound measurements of the dimensions of the eye (in a selected number of dogs). The aims of these examinations are as follows:

- To ascertain the extent of the clinical problem in the breed
- To ascertain the extent of abnormality of the pectinate ligament (the criterion used in the BVA eye test)
- To ascertain the heritability of this abnormality
- To ascertain the relationship between this abnormality and the likelihood of clinical glaucoma

Preliminary results have shown that abnormality of the pectinate ligament (known as pectinate ligament dysplasia or PLD) is widespread in the breed. Problems exist because different examiners may interpret the extent of the abnormality differently, resulting in possible inconsistencies in BVA test results. Because the extent of the abnormality in any particular dog is subject to individual interpretations, at the Animal Health Trust we have sought to find a more objective measurement which may prove to have some predictive value. In the Great Dane it has been found that the depth of the anterior chamber of the eye (from the inner surface of the cornea to the front surface of the lens) correlates well with the likelihood of developing glaucoma and has the advantage of being able to be precisely by ultrasound techniques. It may be that a similar situation exists in the Welsh Springer but we need to see more dogs, particularly dogs affected by glaucoma or their close relatives, before we can arrive at reliable conclusions.

In the meantime it is correct to say that the only dogs which should be bred from are those which have a current BVA eye test pass.

BD Cottrell

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