

HOW DO WE START THE CONVERSATION ABOUT GLAUCOMA – A THING THAT NO ONE WANTS TO TALK ABOUT?

FACT: Primary Angle Closure Glaucoma or PACG is STILL a problem in Bouviers

FACT: PACG is underreported in Bouviers

FACT: PACG is a “recessive inheritance.” Both mother and father must have the gene to cause the condition in their offspring.

LET'S START THE CONVERSATION:

What do we know?

In 2005, the Bouvier Health Foundation sponsored a 7 - 9 year study on Glaucoma in Bouviers at the University of Michigan with Dr. Paul Miller et al. The final report was published in 2017. This study is revered today as one of the best-designed and executed research studies on Canine Glaucoma. The study followed 92 dogs over a period of 7 - 9 years. Nine of the 92 (9.8%) dogs developed PACG. The presence of narrow or closed iridocorneal angle and narrow or closed ciliary cleft were significantly associated with the development of PACG. In addition, all dogs that developed PACG shared one common male sire or grandsire, thus suggesting a genetic component for the disease. (JAVMA 2017;250:60-67)

An abnormality that plays an essential role in developing PACG in Bouviers is pectinate ligament dysplasia (PLD). Bouviers have a genetic predisposition to PLD. It is estimated that up to 75% of Bouviers have PLD without any other eye abnormalities, yet the occurrence of PACG in Bouviers is estimated at only 1.3%. On the other hand, all Bouviers with PACG have PLD. (*Van der Linde-sipman JS. 1987*)

What do we need to know?

The true incidence of PACG in Bouviers is not known. However, the 2021 ACVO/OFA's “Blue Book” on Ocular Disorders lists ONE Bouvier with Glaucoma from 1991 to 2021. **ONLY ONE!**

The Bouvier Health Foundation worked with OFA and launched a Bouvier Health Survey in June 2020. The survey collects data from Bouvier owners, and currently, the survey DATA lists 19 Bouviers with Glaucoma, ten males and nine females.

Again, this is an underreported disease.....

Ask yourself how many Bouviers you know have lost an eye to glaucoma. Bouvier owners can name one or more. So why is it that we do not have accurate numbers?

What we need to know

- How do we identify the dogs at risk for developing PACG before they develop disease symptoms? A gonioscopy exam is a test used to detect the presence of a narrow or closed iridocorneal angle; an ultrasound biomicroscopic (UBM) test is used to evaluate a narrow or closed ciliary cleft. OFA recommends that Bouviers obtain a CAER (Companion Animal Eye Registry) exam, not a gonioscopy. UBM tests are rarely done, usually only in a university setting.
- How often should we do eye testing, including gonioscopy? What is the best age to start? Bouvier angles change as they age and may progress from normal to abnormal. Bouviers are at the highest risk of developing PACG between 4-8 years of age.
- Does treatment with prophylactic medication stop or prevent PACG?
- What additional factors are responsible for the development of PACG other than narrow or closed angles?
- What specific genes are responsible for PACG in the Bouvier des Flandres? Genetic research in this area is paramount.

A better understanding of the disease can ensure clarity around test interpretation, follow-up testing, treatment, and future breeding options. There IS factual information available to us. If we have open conversations based on the data, we can learn about the best diagnostic tools, genetics, and best-practice medication. But if no one talks about it and we ignore it, it becomes a bigger problem with more of our dogs affected. Glaucoma is a disease often “hidden in plain sight”. We cannot overlook a very tough situation. So let’s start the conversation that no one wants to talk about so we can improve our breed.

The Bouvier Health Foundation is kicking off a Glaucoma Awareness Campaign.

Let’s start the conversation:

**DON’T LOSE SIGHT
OF GLAUCOMA**

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