

Eye Disorders of the Basenji Dog

PPM - Persistent Pupillary Membrane (in brief):

PPM is a very common problem in the basenji breed. When a puppy is born, his eyes appear a bluish color. This color is caused by the embryonic membranes covering the eyes. As the pup grows, the membranes break apart and normally disappear by four to five weeks of age. When these membranes do not disappear they become known as PPM, of which there are several types; Iris Sheets, Iris to Lens, Iris to Cornea and Iris to Iris.

Julie Gionfriddo, DVM Diplomat ACVO writes:

"Iris to lens PPMs are more problematical. These PPMs cause opacities (cataracts) at the point where they are attached to the lens. The cataracts do not usually progress and cause only minor visual deficits. Iris to cornea PPMs cause opacities on the cornea due to their ability to damage the inner lining of the cornea. These opacities may be small or may be severe due to the development of fluid in the cornea. Severely affected puppies (with numerous strands) may be blind, though they may improve as they get older. The strands may regress but do not disappear. In general, iris to iris PPMs cause no problems. They may be single strands or a forked structure. These PPMs may break and become less prominent as the puppy gets older, but they usually do not disappear completely.

*PPMs are found in many breeds of dog. In most of these breeds, iris to iris PPMs are classified by CERF (Canine Eye Registration Foundation) as a "breeder option" problem. This means that most of the PPMs, which have been reported in these breeds, have been small and are probably sporadically occurring and not hereditary defects. In some breeds, PPMs are known to be hereditary and puppies who have any type of PPM will not receive a certification number. The **Basenji**** is the most well-known but CERF will also not certify Chow Chows, Mastiffs, Pembroke Welsh Corgis, or Yorkshire Terriers with PPMs. Members of these breeds have been shown to produce offspring with blindness directly associated with their PPMs. In these breeds, the mechanism of inheritance is not known but breeding any of these dogs with PPMs is highly discouraged. Even severe PPM*

rarely causes vision problems but breeders should be aware of the intensity of any PPM their dog has and try to lessen the severity in future generations."

**** The Basenji Club of America petitioned CERF asking for Iris to Iris PPMs to be CERF-able and considered "breeder option". Per the February 2003 CERF Newsletter Iris to Iris PPM in the basenji breed is now CERF-able and is "breeder's option".**

PRA (Progressive Retinal Atrophy):

PRA is a blinding condition. Early signs include night blindness and lack of ability to adjust vision to dim light. Later on, daytime vision will also begin to fail. There are two types of PRA onset: early onset and late onset. In early onset the disease results from abnormal or arrested development of the photoreceptors -- the visual cells in their retina, and affects pups very early in life. In late onset, which includes the basenji, affected dogs appear normal when young, but develop PRA as adults. Research has shown there to be, at the very least, 5 different types of canine PRA. Once believed to be a simple recessive in the basenji dog, research has shown that affected bred to affected were not producing the expected affected, therefore the mode of inheritance in the basenji is presently unknown.

Breeders and pet owners alike should test their dogs regularly. Diagnosis of any form of PRA we currently do not have a DNA test for is normally made by ophthalmoscope examination by a board certified ophthalmologist.

March 2013: Basenjies now have a DNA direct test for ONE type of PRA, PRA BJ-1 "Basenji Night Blindness".

It is believed basenjies are affected with at least three (3) types of PRA. Work is underway to identify the other two forms of PRA. Any pups born AFTER March 2013 should NEVER be affected with PRA BJ-1. If they are, you need to ask some hard questions of your breeder as to why they bred non-health tested basenjies or allowed two intact carriers of the opposite sex access to each other which resulted in an "oops" litter.

There is no legitimate reason with today's knowledge and advancements in science that ANY affected PRA BJ-1 basenji should ever be created again. Please support those ethical breeders who properly test for known genetic problems within our breed; fanconi, PRA and hip dysplasia. Don't just take their word for it - visit web sites such as the Orthopedic Foundation for Animals (offa.org) and LOOK for dogs bearing the kennel name of the breeder you are researching. See for yourself if they are truly testing their breeding stock or sending you a sales pitch. Sadly there are many "reputable" breeders out there that say they are testing, but have nothing to show for it. Do your research or caveat emptor!

Clear by Parentage - Only direct DNA tested dogs can have "clear by parentage" offspring per the OFA. In summary: if both parents are DNA tested clear, the FIRST generation offspring can be Clear by parentage (CBP). **Note ONLY the FIRST generation can be called this.** If you keep a pup from a CBP and then breed that pup, its offspring (grand-puppy to the CBP) will NEED to be DNA tested for either Fanconi or PRA before being bred.

Please note: sinbajé basenjis will *ONLY refer* to those ethical BCOA member breeders who are actively using this tool to safely eradicate this disease from the gene pool.

FOR MORE INFORMATION ON THESE AND OTHER POTENTIAL EYE ISSUES OF THE BASENJI DOG PLEASE VISIT: BASENJI.ORG