



**Ocular disorders**

	Diagnosis	Description and comments specific to the breeds	Inheritance	Gene/marker test	References
A	Retinal dystrophy, RPE65 mutation	Congenital night blindness, variable degree of visual impairment in daylight, normal fundus to age 2-3 years, then slight vascular attenuation and generalized pigmentary changes in the fundus that progress peripherally. ERGs diagnostic at age 5-8 weeks.	Autosomal recessive	YES	1,2,3
B	Retinal Pigment Epithelial Dystrophy (RPED)	No visual problems in young dogs but after several years visual impairment, pigmentation of central parts of the fundus spreading peripherally with time. ERGs not diagnostic. Possible vitamin E-deficiency.	Not worked out : may be multiple factors that predispose to the disease among which one or more may be hereditary	None	4,5

**The ECVO's advice relating to hereditary eye disease control**

A	Retinal dystrophy, RPE65 mutation	NO BREEDING from the affected animal, its parents or offspring
B	Retinal Pigment Epithelial Dystrophy (RPED)	NO BREEDING from the affected animal

**Recommendations regarding age and frequency for eye examinations**

As for all other breeds (see part 7)

### References

- 1- Narfström K et al : Hereditary retinal dystrophy in the Briard dog : Clinical and hereditary characteristics. Prog Vet Comp Ophthalmol ; 4 :85-92, 1994
- 2- Veske A et al : Retinal dystrophy of Swedish Briard/Beagle dogs is due to a 4-bp deletion in RPE65. Genomics 57 :57-61, 1999.
- 3- Wrigstad A. Et al : Slowly progressive changes in the retina and the retinal pigment epithelium in Briard dogs with hereditary retinal dystrophy. : A morphological study. Doc Ophthalmol 87 :337-354, 1994
- 4-Bedford PCG: Retinal Pigment Epithelial Dystrophy (RPED) : A study of the disease in the Briard. J small Anim Pract 25 : 129-138, 1984
- 5-Lightfoot RM et al : Retinal pigment epithelial dystrophy in Briard dogs. Res VetSci 60 :17, 1996