PRIMARY LENS LUXATION

The SMBTC strongly recommends its members DNA test their Miniature Bull Terrier for PLL

“The DNA test can be used to determine a dog’s genotype with respect to this mutation. Dogs will be identified as CLEAR (has two normal copies of the gene), CARRIER (has one normal copy and one mutated copy) and AFFECTED (has two copies of the mutation). Breeders will be given an estimate of each dog’s risk of developing PLL depending on their genotype and will be able to make sensible breeding decisions that minimise the risk of producing dogs that will become affected by this serious and debilitating condition. We would like to sincerely thank all the many owners and breeders, from all over the world, who have contributed DNA and information from their dogs to this project. This discovery would not have been possible without them. We would also like to thank everybody who has made a financial donation to support the research.” AHT.

Primary Lens Luxation – a guide to your DNA test result.

a) The Mini can either be affected by PLL – will develop the disease, usually between the ages of 3 – 7 and should have regular eye tests with a BVA approved eye tester). If caught in the early stages when the lens is “wobbling” it is possible to treat with drops called Xalatan, which may prolong the life of the eye and the need for surgery, but of course, this is only possible if you regularly eye test your dogs. The cost of an eye test is about £20 – £25 through a BVA approved centre.

b) or, a carrier of PLL – Is very unlikely to develop the condition themselves, but could pass it on to their puppies if bred from. There is a tiny percentage of carriers which will go on to develop clinical signs of PLL although this is currently being calculated at approximately 2%. The Southern Miniature Bull Terrier Club recommends that all carriers still undergo routine 6 monthly eye tests in order to catch the problem early and hopefully treat.

c) or, clear from PLL – will never suffer from or pass on the condition.

DESCRIPTION; Primary Lens Luxation is a condition where the lens is partially or fully dislocated from the threads that hold it in position within the eye. These tiny threads, sometimes called ligaments are known as “zonules” and they can weaken and break which is what causes the condition. It depends on how many and how quickly these break that determines the speed of onset of this condition. Using normal ophthalmic instruments (such as your own vet may possess) it is difficult to even see these small threads. What the experienced ophthalmologist should also be looking for is a wobble in the lens as the dog moves his head around. This indicates that the zonules are becoming weak. If the zonules are weakened and causing the lens to wobble, this is called a subluxated lens (partial dislocation), whereas if the lens is completely detached from the zonules it is referred to as a luxated lens.

The lens can either luxate forward or backwards. Forward is called anterior luxation. Backwards is called posterior luxation. The lens can also detach at an angle which can cause bruising of the cornea (oedema of the cornea). It is more usual for the lens to fall forwards and this shows as a greenish, bluish tint to the eye – this is because the pupil cannot contract and is fully open, covering the normal iris and this colour is actually a reflection and looks something like when you see an animal’s eyes at night when a light is shone at them.

Laboklin Laboratories offer a DNA test for PLL