

Important message for all Beagle Club members

Musladin-Leuke Syndrome (previously Chinese Beagle Syndrome)

It was in the late summer that the world of Beagles was shocked to hear that cases of this syndrome had occurred in the UK. It was of great credit to both parties involved that they "went public" straight away in the best interests of our breed. MLS was not thought to be present in the UK although cases had been reported in the USA. As a consequence alarm bells rung throughout the breed.

Very quickly a testing procedure was established using a Lab in the USA and a database of tested UK Beagles set-up by Sam Goldberg the UK's Beagle Health Coordinator. The Beagle Club is confident that the problem is not endemic in the UK and that the swift response of Sam and the procedures set-up should ensure that any potential threat is not allowed to develop. The health and well being of our breed is paramount and the club fully supports the testing and database initiative and is in dialogue with The Kennel Club in seeking to have the testing regime and database become "official". We will report back to members as soon as we have any developments.

The following is an explanation from Sam on MLS and the current situation

Musladin-Leuke Syndrome (MLS) is an inherited problem, which results in a Beagle born with several defects. These problems are characterised by short outer toes on the front and sometimes all four feet, high set creased ears on a flat skull with extra cartilage in them, slant narrowed eyes and very thick tight skin with little scruff. Such pups are small in stature with a very stiff gait BUT not all affected pups will show all these signs. The short toes make them walk like a ballerina on their middle toes. They have a very good gregarious temperament although many have been reported to develop seizures. Some will live a normal life span as the condition may stabilise once they reach maturity but they are smaller than normal and some die very young of problems associated with the disease.

A simple recessive gene, which is unique to Beagles, causes the disease and affected puppies arise when two carrier parents are mated together. The Kennel Club has a helpful web site page, which explains canine inheritance <http://www.thekennelclub.org.uk/item/327> and shows that we would expect a mating of two carrier dogs to produce 25% clear, 25% affected and 50% carriers in a litter.

The incidence of the disease is thought to be 2-3% in the Beagle population and has been reported around the world. Beagles in the UK have now been reported as carrying the defective gene and fortunately we have a DNA test available to eradicate it. The test was developed at UC Davis California by Dr Mark Neff and is offered by the Veterinary Genetics Laboratory there using a simple collection method of three cheek swabs. <http://www.vgl.ucdavis.edu/services/MLS.php>

There are human diseases, which are similar called "Stiff skin syndrome" and also Geleophysic dysplasia both of which are rare inherited disorders. MLS sufferers have a thick inelastic skin, and thick fibrous muscles with little flexion even under anaesthesia. This leads to the stiff gait and also the hard inflexible abdominal wall. The facial features are produced as the bone is very dense and the ears and skin thickened pulling back the skin and hence te slanted eyes.

A word of caution: we must not just eliminate all carriers from our population at the outset of testing or we become too focused on the disease and forget other things. We can use this test as a tool and help us to only mate Clear dogs together or a Carrier with a Clear dog. This way affected puppies are not produced and we dilute the gene in the population. We run the risk of ruining the beagle in the UK if we do this too quickly. We must use the test over time to ensure we do not mate Carriers together and to help us make decisions about which puppies to keep in the future. Pups may be tested before they are sold as the only criterion is not to have eaten or drunk for 60minutes before the swabs are taken.

We are setting up a web site dedicated to this disease and including a searchable database to help breeders understand how to avoid breeding affected puppies and the heartache that goes with this. Watch this space for news!