PYRUVATE DEHYDROGENASE DEFICIENCY

There have been a number of enquiries about the above disease. The following may help you recognize a puppy showing symptoms.

This disease, which is exactly the same in dogs as in humans, has only very recently been found in Sussex and Clumber Spaniels. Briefly, it is caused by a deficiency of blood pyruvate dehydrogenase which converts pyruvic acid to the next compound in the biochemical energy chain, or by a deficiency of one of the promoters of this enzyme. This causes a build up of pyruvic acid in the blood which reduces the blood pH to a level where it can no longer support life.

The symptoms are usually regarded as those of a heart attack.

The attack usually occurs during or after exercise and the puppy collapses, usually recovering on its own. Secondary symptoms are the drinking of large amounts of water and a general disinclination to take exercise.

It is very rare for an untreated puppy to reach adulthood.

Vets have usually treated the puppy for heart trouble which of course is no good. Mr. Heritage of the Cambridge Veterinary College can tell whether a dog is affected by means of a simple blood test and the condition can apparently be treated by oral administration of acetyl chloride. (An enzyme promoter.)

Mr. Heritage will however only treat dogs whose owners will have them spayed or vasectomized.

The researchers are not at the moment able to give any decision on the genetics of the disease, but are obviously very keen to examine as many dogs as possible especially the sires and dams of affected puppies.

This is an opportunity for all of us in Sussex and Clumbers to give as much information as possible to this research project and to quickly eradicate any chance of it becoming widespread.

If we all tell people purchasing puppies to contact Cambridge if the puppy shows these symptoms, the puppies' life will probably be saved and the research (which concerns humans too) will be greatly assisted.

I would only add that we owe a great debt to Faith Gilham for having taken a lead in the matter, and I hope that everyone with any suspicions as to their own puppies will take appropriate action.