

# Juvenile Renal Dysplasia (JRD)

## MY OPINIONS

by David Payne

JRD affects kidney development by varying degrees. In a very similar way that Hip Dysplasia (HD) affects Hip development in varying degrees, from a hip score of 0:0 = 0 up to 53:53 = 106 and every variable score in between, including unbalanced scores such as 03:47 = 50. I well remember the varying opinions of GSD breeders when asked to submit their dogs to an x-ray when the Hip Dysplasia identification Scheme was introduced. Some breeders still reject/ignore the HD Scheme. The Elbow Dysplasia (ED) Scheme here in the UK is very poorly used by breeders and many stud dogs are not haemophilia tested. So readers will now understand that many breeders are reluctant to accept new Health Screening Tests, this reluctance must be addressed, mainly because there will be many more DNA test for various diseases discovered in the not to distant future, and our breed organisations should therefore develop a policy for their introduction, with particular emphasis on AGREED TESTING PROCEDURES, FULL RESULTS REGISTRATION & PUBLICATION. This could be organised by the Kennel Club or/and the GSD Breed Council.

Of course I can understand these organisations waiting until all patenting and scientific publication of any Health Screening Test is completed, and thus fully authenticated. The JRD DNA Test is in the process of becoming fully authenticated. In the meantime, breeders have choices, either to test NOW, or to wait until the test is authenticated and then to test. I chose to test now, others have made similar decisions and others have decided wait. Concern about the current absence of authentication, is no justification to dismiss the test as false or inaccurate, it is simply justification to wait until it is authenticated before testing.

I believe that some GSD breeders are JRD testing some of their dogs and when a dog is identified as a JRD CARRIER, they are keeping it secret, and some of these breeders may also be making strenuous efforts to undermine the validity of this JRD DNA Test to avoid facing up to reality. Denial of factual reality is a common occurrence amongst breeders and exhibitors, frequently identifiable when discussing show results. Every GSD breeder and owner should realise that when this JRD DNA Test is fully validated, which is expected sometime during next year 2009, JRD DNA testing will identify JRD carriers, as it is already doing. DNA tests for JRD can and will identify, through the pedigrees of the identified carriers, which dogs the JRD was most likely to have been inherited from. By a process of further testing, which will happen, the parental carrier is most likely to be identified. Breeders who do not JRD DNA test will not be able to avoid the eventual identification of any dogs that are JRD carriers. Many puppy owners will have them JRD tested and identified JRD carriers will lead to questions about their parents and their pedigree.

I remember a similar situation in respect of a breeder/owner of two GSD brothers who were at stud, without them being Haemophilia tested. Several offspring from these two dogs were haemophilia tested by their owners and identified with Haemophilia, which clearly indicated their sires had Haemophilia, which proved to be the case. This also highlighted the importance of haemophilia testing stud dogs. Every stud dog owner should have them Haemophilia tested.

I also believe that it is possible for a register of JRD tested GSD to be organised by the Kennel Club or Breed Council, and be included on KC registration certificates.

"I HAVE A DREAM" that one day ALL health screening tests will be compulsory for ALL dogs before they are used for breeding, and details will be included on all Kennel Club Registration Certificates. My dream is certainly a nightmare for all unscrupulous GSD breeders. I am very pleased the GSD "partnership" is united in their determination to push and push very hard to make compulsory Health Screening tests a reality. This "partnership" offers hope for our breed, I give them my fullest support.

Remembering that JRD affects kidneys by varying degrees, some dogs may be slightly affected with between 1% to 5% loss of kidney function and these will live normal lives. Others may be affected with up to 50% loss of kidney function and most if not all of these dogs will live normal lives.

It is not until JRD has caused more than 50% loss of kidney function that the signs of kidney problems may become apparent. When kidney function is around 70% less than normal the toxins build up in the dogs blood leading to fatal uremic poisoning. I ask the question: What frequencies of GSD fatalities from JRD are required for GSD breeders to take this disease seriously? Every single owner of a GSD that dies from JRD will answer this question very easily, EVEN ONE DEATH FROM JRD IS ONE TOO MANY!

These facts clearly indicate the difficulty of convincing breeders to test for JRD, because fatalities through JRD are thankfully and mercifully rare in GSD here in the UK, and also the only definitive 'clinical test' for JRD is a kidney biopsy, which few if any GSD breeders/owners would put their apparently healthy dogs through. However if breeders continue to breed without knowledge of the JRD status of the parents, and a JRD CARRIER, or worse still a JRD HOMOZYGOTE CARRIER is involved, and/or a very popular stud dog happens to be one of these JRD CARRIERS, then JRD will escalate in the GSD breed with consequential higher incidence of fatalities. Breeders may be able to cover up infrequent fatalities however if JRD escalates fatalities will become much more difficult to cover up. By then of course JRD will have become much more widespread in GSD and much more difficult to control or eradicate in our breed.

The JRD DNA test was discovered by Doctor Mary Whiteley (Biologist) and is currently going through normal patenting processes, following which scientific publication takes place. It is anticipated this will be completed by July 2009. In the meantime the JRD DNA Test has been made available by Doctor Mary Whiteley through her own company [DOGenes Inc.](#) of Canada. The test will not be available elsewhere until the full scientific authentication process has been completed. It is understandable that until this patenting and scientific publishing has been completed, many people, scientific, veterinary, breeders and others, will not accept the validity of the JRD DNA Test. I just hope that the incidence of JRD in our GSD breed does not escalate to a much higher level in the meantime. In some breeds JRD has reached such high levels of incidence that most dogs tested are carriers, and breeders are somewhat relieved when they test a dog and it is a carrier, and not a homozygote carrier. I pray that JRD does not reach such levels in the GSD breed.

I look forward to when most GSD breeders can DNA test their dogs for JRD. Of course there are other diseases that can affect GSD which may be considered more serious than JRD; I sincerely hope DNA tests are discovered for all of these. It is Biologists such as Doctor Mary Whiteley who we need to do the painstaking and expensive research in order to discover such DNA tests. I do not know of any GSD breeder capable of doing such research, and I certainly do not know of any GSD breeder capable of scientifically challenging such research or DNA test discoveries. **Until the JRD DNA Test is scientifically published NO other scientist can have any knowledge of the test, it is being patented around the world, and until that is completed the scientific details of the JRD DNA test are completely secret. So clearly no individual or organisation can make any meaningful criticism of the test.** To question the integrity of a biologist like Doctor Mary Whiteley, in respect of her claims regarding her discovery of a DNA test for JRD, after years of dedicated scientific research, is both unacceptable and offensive. To consider that she could have waited some two to three years after her discovery, whilst all patenting and scientific publication is complete, would have meant depriving those breeds with a very high incidence of JRD from starting their fight to reduce and hopefully eliminate JRD from their breeds.

I understand that the treating of kidney failure is one of the most consistently discouraging aspects of veterinary medical practice. The difficulty stems from the fact that once a dog has lost 75% of total renal function, the ability to remove metabolic waste products is outweighed by the build up of those toxins. The dog's kidneys are simply not able to keep up with the blood cleaning and as a result gradually its blood becomes increasingly more toxic. Body chemistry swings more and more acidic, important chemicals and nutrients are lost from the body and the animal comes gradually closer and closer to a fatal uremic poisoning. In some cases, gradual kidney tissue loss can be present for years before the patient becomes critical and actual "renal failure" is diagnosed.