

**Necropsy Project—
Initiated in 2002 because of spinal problems in the breed with the
support and guidance of Dr. George Padgett**

By Judy Huston

Why do we have a Necropsy Project?

Dr. George Padgett, author of *The Control of Canine Genetic Diseases*, and our mentor when we did the Health and Genetics Survey in 2000, urged us to institute the Necropsy Project with his assertion that necropsy was the only way we were ever going to know whether the White Shepherd breed has Degenerative Myelopathy or whether it is Lumbosacral Stenosis and Intervertebral Disc Disease (IVDD) that plague us. From all indications to date, it appears that IVDD and Spondylosis cause most of the spinal problems in our dogs. Also in the last couple of years we have begun to identify lines with Transitional Vertebra when they get hips tested by OFA. This condition is thought to promote instability in the spine. *This condition needs to be reported along with the hip and elbow results.*

Are spinal issues critical in our breed?

We really don't know how critical this problem is for us. There are probably many more dogs than ever get reported that suffered from spinal problems that were never diagnosed. Some pathologists appear to expect to see IVDD and Spondylosis as a function of aging. If this is the case, then the dogs with no clinical symptoms that are "old dogs" could possibly be entered under SECONDARY instead of GENETIC CONDITIONS in our Necropsy Database—an example of a dog like this would be Dylan. So is it only our younger dogs with IVDD that is problematic? And, is there a distinction between younger dogs with injuries causing IVDD or is it the predisposition to IVDD that allowed the injury to happen in the first place? Many experts believe this is the case. Some have said that the only way we'll eliminate spinal problems in our breed is to breed dogs with shorter backs. Someday, there will be more research on Type II IVDD so we can get the answers to more of these questions.

Even with older dogs that had no clinical symptoms of IVDD or Spondylosis if they produce offspring diagnosed with it, then it may be something to breed away from in those lines. Again, we just don't know yet. My thoughts are that we breed as carefully as possible, we follow the lines where dogs have been diagnosed with it for whatever reason, and we keep sending whole blood samples to Clemson University until Dr. Clark has enough to start some research for us.

Where do we stand with Degenerative Myelopathy?

We are fortunate to have a test for DM—it is the OFA DM test offered as a result of the research done at University of Missouri. It now appears that there may be two forms of Degenerative Myelopathy. A few of our dogs tested with the OFA DM method have been identified as carriers. Two of our dogs have been diagnosed with Degenerative Myelopathy. One was tested and was "normal" on this test. The second dog wasn't tested, but his offspring have tested normal. Now, more research has to be conducted to see if there are two forms and to determine whether our breed can be affected by both.

We need our dogs tested and their blood in a DNA Repository. Any dog that is going to have a necropsy must have blood drawn prior to natural death or being euthanized. So planning ahead is crucial.

If you want more information on the Necropsy process:

Go to the genetics website at www.wsgenetics.com and find the contact information for your geographical area. Go to the sidebar and click on necropsy pages and click on the bottom link. Go to Necropsy Resources/Universities for additional information. Then, download necessary forms which include the paperwork mentioned above.

If after you have done all this you still have questions do not hesitate to write Judy judy@wsgenetics.com or Joanne joanne@hoofprint.ws (for Canada).