UNIVERSITY of PENNSYLVANIA

The School of Veterinary Medicine
3800 Spruce Street
Philadelphia, PA 19104-

October 4, 1988

Mr. William W. Brainard, Jr.
"Vermont"
Rt. 1, Box 25G
Marshall, VA 22115

Dear Mr. Brainard:

Dean Andrews has forwarded to me the slides, electron micrographs, laboratory data, and clinical history on "Mona" Clark.

Her early history is difficult to evaluate as no clinical pathology values are available for examination.

I have reviewed all the data provided with Dr. Ken Bovee, to ensure complete and accurate evaluation of the clinical data. From the time when laboratory data is available this bitch was already in severe renal failure with elevation of B.U.N., creatinine and phosphorous. There was no improvement over a period of 6 weeks at which time she was euthanized.

Kidney tissue was taken for electron microscopy. The findings on electron microscopy include fusion of foot-processes of glomerular epithelial cells, thickening of the glomerular basement membrane, focal dense deposits in the basement membrane, peritubular fibrosis with collagen readily evident beneath the tubular basement membrane and the presence of intratubular crystals, probably oxalate crystals.

The histopathology of the specimen submitted at the time of death was read by Dr. George Parker and I am in agreement with his findings. The histopathology changes seen are slight decrease in glomerular numbers, shrinkage of the glomerular tuft, dilation of bowman's space with protein in this site. A marked periglomerular sclerosis is present. Tubules vary in their pathology from normal to atrophic, with protein casts and oxalate crystals in the lumina. Marked interstitial fibrosis is present with aggregates of hemosiderophages present. A moderate diffuse interstitial lymphoplasmacytic infiltrate is also evident. Major arterioles show mild medial hyperplasia, insufficient to be concerned about possible hypertension as an etiology.

In summary clinical laboratory findings, histopathology, and electron microscopy all show end-stage renal disease. What we are unfortunately unable to answer from our evaluation is what the underlying pathogenesis may have been and when it occurred. In most instances of renal disease the early clinical symptoms and changes are subclinical and therefore it is only when the disease has progressed and become chronic that it is recognized clinically. At this stage pathology is rarely helpful.

Thank you for allowing me to review this case. If I can be of further help in this matter, please call at (215)-898-8977.

Sincerely,

Michael H. Goldschmidt, B.V.M.S., M.R.C.V.S
Associate Professor, Pathology
Diplomate, A.C.V.P.

MHG:rac

IN THE END, AFTER ALL THE CAREFUL OBSERVATION, LABORATORY TESTS, HISTOLOGY AND ELECTRON MICROSCOPY, THERE WAS STILL NO DIFINITIVE ANSWER TO THE QUESTION; WHY MY DOG?
MAYBE YOU CAN HELP BY ANSWERING THE QUESTIONAIRRE

Health Committee

Renal Disease Survey

As a conclusion to the material presented in th e newsletter, the health committee is interested in YOUR experience with renal disease in dogs under the age of 10. Your pedigrees would be most helpful, especially if you know of others in the pedigree with renal disease. Also any specific diagnosis, pathology reports etc are useful.

Please submit these surveys to Patti Clark, 227 Hattertown Road, Newtown, Ct. 06470.

Number of dogs owned _____

Number of dogs under age 10 with a diagnosis of renal disease _____

In each case do you know of any other dogs in the pedigree with renal disease at a young age? Give as much information as you can about each case.

Please answer or mark a check for each affected dog.

	Dog 1	Dog 2	Dog 3	Dog 4
Age at death				
Sex				
Delivered by C- Section				
Anaethetic used				
Tranquilizer				
Medication of bitch prior to whelp				
Medications as newborn				
Medication 1 wk to 1 month				

	DOG 1	DOG 2	DOG 3	DOG 4
Urinary Tract infection				
Urinary frequency Age of onset				
Increased thirst				
Bad Breath				
Weight loss				
ingestion of poison				
tumor				
other serious illness or trauma				
medication prior to onset of renal disease				
Weight loss prior to discovery of renal disease				
Symptom that caused you to go to the vet				
Any other information or theories as to why your dog was affected?				
Was this animal bred?				
Condition of offspring in regard to renal disease?				

Anything else that my be helpful?

Next, a call for articles and cases related to spleen torsion.