

**CENTRAL LABORATORY FOR VETERINARIANS LTD.**

**CENTRAL VETERINARY PATHOLOGY LABORATORY LTD.**

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■ Calgary	Unit #19, 5080 12A Street SE, Calgary, AB T2G 5K9	Ph: (403) 214-1506	Fx: (403) 214-1562	1-800-461-3631
■ Edmonton	8131 Roper Road, Edmonton, AB T6E 6S4	Ph: (780) 437-8808	Fx: (780) 437-8822	1-800-668-8855

15 June 2007

**LAB NO:** C7-962

**HOSPITAL:** EDMONTON VET CLINIC C070303779

**DOCTOR:** KERR

**OWNER:** GORDON

**ANIMAL:** CAPRICE

**BIOPSY SITE:** NECROPSY

**GROSS:** The dog was thin exhibiting poor body condition. The chest cavity did not collapse. The nasal region was shortened exhibiting a moderate superior prognathism. The right thyroid was pale and smaller than normal. The left thyroid gland was paler than normal. The lung field was firm with diffuse severe white coalescing nodules in all lung fields with very little functional lung field being seen. Pancreatic atrophy was noted. The remaining internal organ system failed to reveal abnormal gross changes. Tissues were collected for histologic evaluation. Norman Lowes, DVM; MVSc.

**HISTOLOGY:** Multiple tissues are examined and include liver, spleen, and multiple sites in the bowel from stomach through small intestine to colon and including adjacent pancreas. Adrenal glands as well as each of the kidneys and pituitary gland are examined. Samples of ovary and uterus are evaluated as well as multiple sites from the brain. Several samples from the lung and femoral bone marrow are evaluated along with portions of urinary bladder, thyroid glands and pancreatic lymph node. Multiple sites from the heart are evaluated. Throughout the lung there is widespread implantation reflecting metastasis of an undifferentiated carcinoma. There is diffuse hypoplasia of exocrine pancreatic tissue. Only ductal elements and endocrine tissue remain in the pancreas. Ectopic thyroid gland tissue is recognized on the epicardial surface of the heart. Sections of kidney reveal mild tubular degeneration and local interstitial infiltration and scarring. These renal changes are mild and the vast majority of renal parenchyma is judged to be normal.

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The liver is diffusely congested and of sufficient duration to result in atrophy of hepatocytes. There is a sprinkling of hemosiderin containing macrophages scattered through the liver. The liver is stained for the presence of copper and iron to reveal an absence of copper (normal) and modest iron deposition reflecting the hemosiderin within macrophages and iron in some of the Kupffer cells. Other tissues are unremarkable or uninformative or altered by modest postmortem change (particularly mucosa of the gastrointestinal tract).

**DIAGNOSIS:**

METASTATIC CARCINOMA, LUNGS  
DIFFUSE EXOCRINE HYPOPLASIA, PANCREAS  
MILD INTERSTITIAL NEPHRITIS WITH TUBULAR NECROSIS  
CHRONIC HEPATIC CONGESTION WITH ATROPHY  
ECTOPIC THYROID GLAND, EPICARDIUM OF HEART

**COMMENTS:**

The primary changes present here is in the lungs where sufficient metastatic tissue is present to compromise this organ and likely to have had secondary effects on the heart, liver and other organs reflecting chronic congestion. No other tissue submitted includes this tumor. A history of prior carcinoma of squamous type is noted but this does not appear to be a squamous cell carcinoma in the lungs. One would have anticipated this dog requiring supplement of pancreatic enzymes but no history is made mention of gastrointestinal problems. If you have questions or comments regarding these observations please call.

*yes*

*[Signature]* D. Gribble, DVM; PhD. Diplomate ACVP

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"Partners in quality care for animals"

EDGE MONT VET CLINIC 740 Phone: 403-239-4657 Fax: 1-403-241-1308 Rcvd: 23-Mar-2007 12:54 pm  
 #12 - 34 EDGEDALE DR. NW Email: Rptd: 31-Mar-2007 1:18 pm  
 CALGARY, AB T3A 2R4

Patient: CAPRICE GORDON Accession: C070303779 Group: C070303779 Final  
 Age: 9y Sex: F Neutered: U Species: Canine Shepherd Vet: Kerr  
 PM FOR WHITE SHEP GENETICS. NB HX ORAL SQUAMOUS CELL CARCINOMA.  
 \*\*PRIVATE CREMATION\*\*  
 HISTO #C07-0962

Tests Ordered: NECRP

Test	Normal	Out of Range	Units	Reference Range
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Histology

Necropsy

THE DOG WAS THIN EXHIBITING POOR BODY CONDITION. THE CHEST CAVITY DID NOT COLLAPSE. THE NASAL REGION WAS SHORTENED EXHIBITING A MODERATE SUPERIOR PROGNATHISM. THE RT THYROID WAS PALE AND SMALLER THAN NORMAL. THE LEFT THYROID GLAND WAS PALER THAN NORMAL. THE LUNG FIELD WAS FIRM WITH DIFFUSE SEVERE WHITE COALESCING NODULES IN ALL LUNG FIELDS WITH VERY LITTLE FUNCTIONAL LUNG FIELD BEING SEEN. PANCREATIC ATROPHY WAS NOTED. THE REMAINING INTERNAL ORGAN SYSTEM FAILED TO REVEAL ABNORMAL GROSS CHANGES. TISSUES COLLECTED FOR HISTOLOGICAL EVALUATION  
 Dr. Norman Lowes

PM 1HR X 2

Comments:

Dr. Jennifer Davies  
 PM COMMENT ON PANCRASE ADDED  
 Dr. Norman Lowes