Past History: Occasional UTI over past couple of years. Treatment with oral a/b.

Indoor/outdoor environment. Spacious indoor living and outdoor recreation.

Diet: FROMM dry with a TBS of plain yogurt fed twice daily

Vaccination program: HW/Lyme test annually

Lyme vaccine, Bordetella annually

Distemper every other year

Travel history:

Daily

Past medical history:

Slightly enlarged prostate determined in 2007

Present Clinical History: March, 2009, blood was occasionally leaking from penis. Xrays of bladder was negative for stones. Patient was kept on antibiotic until the ultrasound was performed on 05/05/09.

Date and time of present illness: 05/05/09 the finding from the ultrasound showed an approx 6.5 cm complex mass, a portion of which was cavitated. A copy of report is attached.

Time sequence of physical findings: Splenectomy and neutering was performed on 05/12/09. Surgeon's post-op results indicated hemangeosarcoma. The pathology report is attached.

Medical/surgical therapy:

Summary of abnormal laboratory findings: Pathology report is attached.

Clincal diagnosis:

Spenic Hemangeosarcoma with Intraperitoneal Metastasis

Owner requests:

Cremation--with return of ashes.

Owner name:

Address: City, state, zip code 75 Old Albany Rd. Greenfield, MA 01301

Susan A. Ewart

Phone number Fax number

413-773-7921 413-773-5752

Animal name Species

Dylan Canine GSD

Breed Age M/C

10½ YES

Body weight

74 lbs.

RIVERBEND ANIMAL HOSPITAL 43 RUSSELL STREET HADLEY, MA 01035

Owner: Patient Species: Breed:

DYLAN CANINE GERMAN SHEPHERD

Age:

10,01/08/1999

EWART

Gender:

Requisition #: 12612 Accession #: U4778000 Order reav'd: 05/13/2009

Ordered by: Reported:

THOMSON, DVM, DAVID 05/15/2009

1-888-433-9987 Online results at www.vetconnect.com

PRIORITY BIOPSY W/ MIC (1 SITE)

Test Result Reference Range Flag Bar Graph SCURCE/HISTORY German Shepherd, 10 years, castrated male. To baseball size splenic masses. Blood nodules scattered in abdomen; free blood in abdomen.

413-587-3737

Account: 82093

MICROSCOPIC DESCRIPTION

Two sections of spleen and additional sections of mesenteric tissue are examined. Adjacent to the normal spleen is a large partially capsulated necrotic hemorrhagic mass that close to the splenic parenchyma is composed of sheets of neoplastic endothelial cells that form small vascular channels containing blood and scattered detached neoplastic cells. The channels are lined by plump endothelial cells that have medium to large, vesicular nuclei, limited amounts of amphophilic cytoplasm and indistinct cell boundaries. Centrally, the tumor is composed primarily of blood and fibrin that widely separates and obscures the neoplastic cells. There are four mitotic figures and 10 400X fields. Multiple meoplastic nodules, similar in appearance to the neoplasm in the spleen are scattered in the mesenteric fat.

MICROSCOPIC INTERPRETATION

Splenic hemangiosarcoma with intraperitoneal metastasis

COMMENTS

Solenic hemangiosarcomas frequently metastasize to distant sites, as in this case, may seed the peritoneal cavity if ruptured.

PATHOLOGIST

Talmage Brown, DVM, PhD

Diplomate, American College

of Veterinary Pathologists

919-302-0520

E-mail: ttbrown@mindspring.com

EWART DYLAN 05/15/2009

FINAL REPORT

PAGE 1 OF 1

Tufts University School of Veterinary Medicine 200 Westboro Road Grafton, MA 01536 (508) 839-7900

Accession No. : 109.009814 Date Received: 07/07/09

Autopsy Report

Mail To:

WHITE SHEPHERD GENETICS PROJECT P.O. BOX 2068 HOWELL, MI, 48844-2068

Customer No.: WHITE

Doctor: Owner.

Patient: N/A Patient I.D.: DYLAN

N/A EWART Species:

Phone:

CANINE

517/546-3046

Breed: WHT SHEPHERD Seat:

Age:

10 yrs. / 6 mos.

Gross Findings:

A ten-year-old, 35 kg castrated male white German Shepherd dog is examined on July 7, 2009 at 1:00 p.m. (postmortem interval 42 hours). Death occurred naturally. The postmortem condition is poor, and there is prominent autolysis of all tissues. The dog is thin and has moderate generalized muscle atrophy and reduced amounts of subcutaneous, omental, and perirenal adipose tissue. An illegible tattoo is present in the right inguinal region. There is an area of subcutaneous hemorrhage on the right ventral abdomen which measures 19.8x9.2 cm. All of the teeth are mildly worn, and the right third maxillary incisor is broken.

There is moderate to marked bony proliferation and bridging along the ventral and ventrolateral surfaces of the vertebral bodies between T4 and S2. These osteophytes range in size from 1.2x2.0x0.5 cm to 3.4x2.3x1.9 cm. The most severely affected sites are between T4 and T10, and at the lumbosacral junction. There is also mild dorsal protrusion of the intervertebral discs at T12-T13, T13-L1, L1-L2, and L4-L5. These discs protrude 4 mm dorsally into the spinal canal. There is an irregularly-shaped light pink-red erosion on the caudal aspect of the left humeral head which measures 1.0x0.6 cm, and a similar erosion on the caudal aspect of the right humeral head which measures 1.0x0.7 cm. Similar erosions are also present on the proximal aspect of the trochlear groove of each femur, measuring 2.0x1.5cm on the left and 1.5x1.0 cm on the right.

The peritoneal cavity contains 3.2 liters of unclotted blood, and there are multiple fibrinous adhesions between the liver and omentum. The liver weighs 826 grams (2.4% of body weight) and contains multiple soft dark red-brown nodular to pedunculated masses which range in size from 1.5 cm to 5.0 cm in diameter. The mesentery contains multiple soft, dark red-black nodules which range in size from 2x2x2 mm to 3.5x2.0x1.0 cm. A dark red-black blood-filled mass measuring 7.5x3.0x2.0 cm is also noted associated with the mesentery. The spleen is absent.

Tufts Veterinary Diagnostic Laboratory Autopsy Report

Accession No.: 109.009814 Page No.: 2

The right hemithorax contains 880 mls of unclotted blood, and the left hemithorax contains 930 mls of unclotted blood. The pericardial sac contains 10ml serosanguineous fluid. The heart weighs 405 grams (1.2% of body weight). There is a soft, round, dark brown-purple mass on the caudal surface of the diaphragm which measures 2.5x3.0x2.0 cm.

The external surface of the brain is grossly normal.

Summary of Gross Findings:

Peritoneal cavity:

- 1. Severe hemoabdomen
- 2. Multifocal metastatic hemangiosarcoma (mesentery -- suspected)
 Liver: Metastatic hemangiosarcoma (suspected)
 Fleural cavity: Bilateral hemothorax

Vertebral column:

Moderate to severe chronic multifocal spondylosis deformans
 Multifocal intervertebral disk disease/dorsal disc herniation
 Glenohumeral and stifle joints: Multifocal mild to moderate erosions of articular cartilage

Microscopic Findings:

Thyroid/parathyroid, slide 5, one section: Follicles multifocally contain mineralized material.

Eye, slides 10 and 11, two sections: There are multifocal bright pink spherical globules (Morgagnian globules) in the subcapsular region.

The following tissues have no significant findings: lung, slide 1, four sections (autolyzed); liver, slide 2, three sections (autolyzed); mesentery, slide 3, one section (autolyzed); adrenal gland, slide 3, two sections (autolyzed); prostate, slide 3, one section; kidney, slide 4, two sections (autolyzed); stomach/jejunum/colon, slide 5, one section each (autolyzed); brain, slides 6 and 7, four sections; spinal cord, slides 8 and 9, seven sections

Histological Diagnoses:

Eyes: Mild bilateral cataractous change

Diagnosis:

Hemoabdomen and metastatic hemangiosarcoma

Comment:

Extensive, marked autolysis is present in most tissues and precludes a detailed or meaningful histologic evaluation. Although metastasis of the splenic hemangiosarcoma to the liver and mesentery was suspected grossly, severe autolysis precludes microscopic confirmation of metastasis. The possibility that the hepatic nodules noted grossly represent hyperplastic foci cannot be ruled out. It is impossible to evaluate the pancreas for acinar atrophy or other lesions due to autolysis. Similarly, the gastrointestinal tract cannot be accurately evaluated.

Marked spondylosis deformans was present in the vertebral column (confirmed radiographically), as well as four mildly herniated intervertebral discs. No microscopic lesions were appreciated in the

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spinal cord, though autolysis is once again a factor clouding evaluation. Moderate degenerative changes were found in both glenohumeral and stifle joints, though the cruciate ligaments were normal. The hip and elbow joints were normal. There was no evidence of dilated cardiomyopathy or other cardiovascular disease.

This autopsy was reviewed by Dr. Richard Jakowski, DACVP.

Pathologist: Date Completed: 07/30/09

Carroll

Called to: Called on: