MICHIGAN STATE UNIVERSITY

DCPAH
Diagnostic Center for Population & Animal Health

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REPORT OF LABORATORY EXAMINATION

Client:
White Shepherd Genetics (295483)
Project - Attn: Judy Huston
PO Box 2068
Howell, MI 48844-2068

Owner:
Seeger, Shannon/Maurice
209 Harper Ln.

Midland MI 48640

Rcvd Date:	05/26/2010 10:39:00 AM	Animal:	TEEZ	MRN:	BRAEHEADSPLEASU
Admitted By:	Not, Provided	Species:	Canine	Breed:	German Shepherd
Ordered By:	N/A	Age:	10 years	Gender:	Female
Encounter:	00997468	Tag/Reg ID:			
CR#:	AP C10146010	Other ID:			

Necropsy Preliminary Report

Accession Number:	Received Date/Time:	Verified Date/Time:	Pathologist:
NC-10-0000609	05/26/2010 11:28:00 AM	05/28/2010 11:34:43 AM	Patterson, Jon S.

History

A 10-year-old, female White German Shepherd was euthanized on 5/25/10. This animal had a history of a cutaneous melanoma, first diagnosed in August 2009. Masses recurred, however, after surgical removal. Additional history is on file at DCPAH.

Gross Description

A 27.75-kg dog in good nutritional (BCS 5/9) and good post mortem condition was presented dead for necropsy. There were nine subcutaneous masses noted: left flank (2 X 1 X 0.5 cm); left inguinal region (2 X 2 X 1 cm); 2 on the medial aspect of the right thigh (1 X 1 X 1 cm, 1 X 2 X 1 cm); 2 on the medial aspect of the left thigh (each 0.5 X 0.5 X 0.5 cm); left most cranial teat (0.7 X 0.7 X 1 cm); to lateral to (right of) the teats in the mid-thorax (0.5 X 0.5 X 0.5 cm); and a mass approximately 7 cm caudal to the left side of the ribcage (1 X 1 X 0.5 cm).
On internal exam, there were approximately 200 mL of serosanguineous fluid within the peritoneal cavity. There were several tan nodules on the parietal surface of the peritoneal wall. The liver contained two tan nodules in the left lateral lobe, one near the capsular surface measuring 1 X 1 X 0.5 cm and one deeper in the parenchyma measuring 0.4 cm in diameter. The pancreas was dark red to gray. Multiple small tan nodules were present in the adrenal glands. The left kidney contained 1 raised tan nodule measuring 1 X 1 X 0.5 cm. The right kidney contained 2 tan nodules, each measuring 1 X 1 X 0.5 cm. One of the nodules from the right kidney was rimmed by dark red discoloration. Seven tan nodules were noted in the diaphragm, ranging in size from pinpoint to 3 X 1 X 2 cm. Numerous (over 20) tan nodules were noted on the parietal surface of the thoracic wall, ranging in size from pinpoint to 0.5 X 0.5 X 0.2 cm. Tan nodules were present throughout all lung fields, varying in size from pinpoint to a 7 X 7 X 3-cm mass in the right cranial lobe. A mass 7 X 6 X 5 cm was found at the tracheal bifurcation and was impinging on the airway of the right mainstem bronchus. On cut section it was firm and had a darker brown discoloration centrally. The right ventricle was dilated and there was endocardiosis of the mitral and aortic valves, characterized by smooth, white, firm nodules on the valve leaflets. Half of each lobe of the thyroid gland was occupied by a tan nodule.
All other organs were grossly unremarkable.

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Gross Diagnosis(es)

Disseminated neoplasia

Comments:
Gross findings are consistent with a highly metastatic neoplastic process, suggestive of carcinomatosis. The primary origin of the cancer could not be determined grossly. Histopathology is in progress and will be described in the final report.

Karla Fenton DVM, MS

Jon S. Patterson, DVM, PhD, DACVP

(Electronically signed by) JSP

Verified: 05.28.2010 11:34

JSP /KAF

Necropsy Final Report

Accession Number:	Received Date/Time:	Verified Date/Time:	Pathologist:
NC-10-0000609	05/26/2010 11:28:00 AM	06/08/2010 02:47:48 PM	Patterson, Jon S.

Microscopic Description

Sections of lung, skin, kidney, pancreas, adrenal gland, heart, spleen, and brain were examined. The skin was characterized by a fairly well demarcated, infiltrative mass composed of a neoplastic cell population arranged in dense interlacing bundles and packets that extended from the mid-dermis into the subcutis. Neoplastic cells were spindle-shaped, contained scant to moderate amounts of eosinophilic cytoplasm and had variably distinct cell borders. The nuclei were round to oval, vesiculated and contained one distinct nucleolus. These cells displayed moderate to marked anisocytosis and anisokaryosis. There were 1-5 mitotic figures per high power field. Pigmentation of the neoplastic cells was not appreciated. This neoplastic cell population was also present within multiple nodules in the lung, renal cortex, trachea, and adrenal gland. All other organs were histologically unremarkable.

Morphologic Diagnosis(es)

Lungs, skin, kidneys, liver, parietal peritoneum, diaphragm, trachea, and adrenal glands: Disseminated malignant neoplasia

Final Diagnosis(es)

Disseminated malignant neoplasia; see comments

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Comments:
Histologic findings are consistent with disseminated malignant neoplasia. The histomorphologic and gross features of these tumors were suggestive of a carcinoma; however, we also included amelanotic malignant melanoma as a possibility, based on clinical history and the highly variable nature of melanomas. Immunohistochemistry would be necessary to more definitively identify the neoplastic cell lineage, and such testing is available upon request for an additional fee at DCPAH.

Karla Fenton DVM, MS

Jon S. Patterson, DVM, PhD, DACVP

(Electronically signed by) JSP

Verified: 06.08.2010 14:47

JSP /KAF