

OMAHA ISIS 3499

DEPARTMENT OF VETERINARY PATHOLOGY

IOWA STATE UNIVERSITY

DIED 06 JUNE 80

POST-MORTEM RECORD

Species Panthera uncia Breed Snow leopard Path. No. 80-M-1941

Age 18 days Sex male Clinic Record No. _____

Owner Henry Doorly Zoo

Address Omaha, Nebraska Clinician Dr. L. Phillips

Euthanasia: Yes No Method _____

Date and Time of Death _____ Students _____

Date and Time of Necropsy _____

Clinical Diagnosis: _____

History, Symptoms:

Born with dam not taking care of this cat or littermate. Pulled after 36 hours for handrearing. Noted right eye had congenital agenesis of middle third of upper palpebral margin. Treatment of eye with artificial tears, chloramphenicol and pilocarpine. Littermate died May 29, 1980 with confirmed Haemobartonella, so this cat was on tetracycline since May 30, 1980. Blood samples the day before confirmation of organisms in other cat were negative for Haemobartonella. Cat became anorectic June, 1980 with some abdominal distension. Blood smear then showed Haemobartonella infection. Hemogren showed PCV of 20 percent, hemoglobin of 8.5 mg percent. Blood transfusion of 16 cc from sire given via jugular with 22 ga. catheter June 5, 1980. Respiratory distress noted early morning June 6th; died shortly after.

Skin Pelage:

Alopecia dorsally from top of head to hips and extending bilaterally down to lateral midline of sides. Agenesis of right, upper, middle third of palpebral margin. Jugular vein right side contains 22 ga. catheter.

Cardiovascular System:

There are no gross lesions of greater vessels, heart, pericardium. The thorax contains a serosanguineous fluid (15-20 cc). A smear of this fluid shows red blood cells, polymorphs, and gram negative rods (numerous).

Respiratory System:

The trachea contains mucoid material in lumen; extends to bronchi. All lobes exhibit a similar pattern; there is a definite line of demarcation between dorsal and ventral halves. The dorsal halves are pink, moist, spongy, while the ventral halves are purple, firm, wet, and heavy. When cut, the lobes show the difference in a very definite line. The dorsal tissue floats, the ventral tissue sinks. The tissue differential is markedly uniform from lobe to lobe.

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Omaha

HENRY DOORLY ZOO

NECROPSY REPORT

*100
no money
born 29 Aug. 1977*

Species: Panthera uncia
Common Name: Snow Leopard
Sex: Male Age: 3 wks. Wt. 1.5 lbs.

ISIS# 2834
Tattoo/Ear Tag# -----

Date: 9-17-77

Prosecutor Lyndsay G. Phillips, Jr., D.V.M.

HISTORY: Found abandoned in exhibit 8-29-77, day of birth, cold. Warmed and moved to nurse to raise. Left tarsus swollen; two small lacerations inside of left rear limb. Eyes open that night. The right upper eyelid is split longitudinally at the midpt. It appeared to have been incomplete in formation, not traumatized. The cornea clouded the next three days. Chloramphenicol eyedrops were given QID. The eye became swollen, the tissue deteriorated; therefore, an enucleation was necessary 9-11-77. His temperature fluctuated, he had alternating loose and normal stools. He was periodically anorectic, and he cried most of the day. Ampicillin therapy was begun from time of first arrival and continued for the first eight days after birth. He was switched to chloromycetin the day of eye surgery. Breathing became labored 12 Sept. and his temperature dropped to 96 F. Late that night attempts to stabilize him with O₂ therapy and warming were not successful. His temperature rose to 107 F. Death was after 12:00 pm.

SKIN PELAGE: Suppurative abscess of right lower gingiva. Left upper eyelid split vertically with healed margins. Swollen left tarsus.

CARDIOVASCULAR (WT): Oedema around heart base (clear, gelatinous). The myocardium in a 0.5 cm. strip over left ventricle is pale. The right A-V valve has two small polypoid areas on one leaflet. On the vessel side of both semi-lunar valves are small, 1 mm. Caseous particles, bilaterally.

RESPIRATORY: The lungs have atelectatic margins; the cardiac and apical lobes are depressed appearing atelectatic. The more central parenchyma is spongy, dark pink, and wet on cut surface. The airways opened are clear, and moist.

DIGESTIVE (WT): There is clear, serous fluid in the stomach (from fluids given orally the previous 10 hours). There are strands of mucous lining the mucosa.

HEMOPOIET (WT): The large mesenteric lymph node is soft, alternately grey-brown and light cream. It is 1.5 cm. long, 1 cm. thick.

S. U. (WT): The kidneys are 2-2.5 cm. long, 1 cm. wide. The cortex is very thin, only 2-3 mm. The remainder of the tissue is medulla. No gross lesions are visible, but the very thin cortex.

MUSCULOSKEL: In both hock joints, there is a creamy, tan tenacious material. The musculature of both rear limbs, below the knee, is pale tan, with lighter cream colored areas (longitudinally directed.) Two ribs, mid-shaft, have 5 mm rounded, whit smooth enlargements (rib 5 left; rib 4 right.)

NERVOUS: No gross lesions.

ENDOCRINE: The adrenal glands have dark brown medullas, cream cortices; they are both gritty when cut.

COMMENTS: This car was one of two males that made the first litter born to this dam. She abandoned them soon after birth. It was obvious from daily records he never settled into a completely stable condition. The abscesses probably resulted from wounds received at birth. Antibiotics did not seem to aid in suppressing the infection of the joints or eye. It is believed that he did not nurse from the dam at anytime.

No	Pair, name, reg. no.	Mating date	Date of birth	Number of cubs	Alive on 6 months age	Reg. no. of the cubs	Notes
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

DEPARTMENT OF VETERINARY PATHOLOGY
IOWA STATE UNIVERSITY
POST-MORTEM RECORD

OMAHA
ISIS
3498
DIED 29 MAY 80

Species Panthera uncia Breed Snow leopard Path. No. 80-M-1940

Age 11 days Sex male Clinic Record No. _____

Owner Henry Doorly Zoo

Address Omaha, Nebraska Clinician Dr. L. Phillips

Euthanasia: Yes No Method _____

Date and Time of Death _____ Students _____

Date and Time of Necropsy _____

Clinical Diagnosis: _____

History, Symptoms: _____

Did not take bottle at 2230 hours on May 28. By morning the animal was crying, lethargic, anorectic, and polyuric. Blood sample drawn. Haemobartonella sp. seen on smear. Died 1900 hours on May 29, 1980.

Skin Pelage:

Bilaterally, upper eyelids at central portions incomplete. More severe on the left where 2-3 mm section incomplete, right side only pinpoint area affected.

Cardiovascular System:

The cardiac musculature is a pale red-tan.

Respiratory System:

All pulmonary tissue is pink-purple, wet, heavy (floats in water and formalin) and exudes clear fluid on cut surface.

Digestive System:

The esophagus is clear; the stomach is filled with 20-25 cc of white, caseous milk curd that crumbles on manipulation. The bile duct is patent; there is chyme in the remaining small intestine and orange-brown stool in the bowel. The liver is a very light tan on the surface and on the cut surface. No pattern is visible in the tissue.

Urinary System:

The kidneys are light in color, slightly more moist than expected. The cortex is 3-4 mm thick.

Musculoskeletal System:

All skeletal musculature is a light tan, very slightly "soft" (decreased turgor).

Nervous System:

The brain tissue is tightly filling the cranial cavity; the hemispheres are gelatinous rather than the creamy texture expected.

Tissues Saved for Histopathology:

Thyroid, thymus, lung, heart, liver, kidney adrenal, and femoral marrow.

Comments:

The last litter from this sire and dam produced a cub with an eye problem that died from a subsequent septic orbit and its littermate died with malaise and confirmed Haemobartonella sp. infection. This was in 1977.

Tentative Diagnosis:

Haemobartonella sp. infection. Pending histopathological findings.

Histopathology:

- A,B Brain - All vessels of the meninges and neuropil are distended and congested with blood. Diffuse edema of the brain is evidenced by perinuclear clear spaces in neurons.
- C Liver - Hepatic cords and lobular architecture are indistinguishable due to severe, diffuse hepatocellular swelling and edema. The cytoplasm of degenerate hepatocytes is more abundant, pale pink, and finely vacuolated.
- C,D Kidney - No microscopic lesions.
- Medulla - As in Slides A and B.
- Thymus - One of several lobules is depleted of lymphocytes while the others are normal.
- E Lung - Diffuse atelectasis is slightly compensated by mild alveolar emphysema.
- Adrenal gland - Medulla is very congested with blood.
- Thyroid gland - No microscopic lesions.
- F,G Eyelid - No microscopic lesions other than those corresponding to the gross description.

Note - The brain edema and the vascular congestion in all organs suggested a generalized inflammatory process. The cause is not obvious, based on these slides.

Diagnosis:

None.

Pathologist C. L. Graham D.V.

Date Completed June 26, 1980

Report Sent June 26, 1980