

WPZ Recs
Used in USDA
Complaint

Specimen Entries

Elephas maximus indicus

Indian Elephant

200337

0.1.0 HANSA

maluy

Medical

None

Treatment -- Give 3000 mg Banamine Paste orally, once a day for 3 days for colic., 3 of 3--Completed by maluy.
 Comment -- Would only consume about 2/3 of the medication.

0.1.0 HANSA

Medical

None

Treatment -- Give 28,800 mg Sulfadiazine/Trimethoprim (5:1), 30 tablets orally, once per day for 5 days. Start treatment June 4, 2007., 2 of 5--Completed by maluy. Comment -- Medication not offered as the priority has changed to getting meds. That will help her GI tract.

0.1.0 HANSA

Medical

None

Treatment -- Dosage reduced on 26 Jan. '07 to 9000 IU (500 IU/ml) alpha tocopherol (18 ml.) daily, 131 of 365--Completed by maluy. Comment -- No remarkable change in condition; administration routine.

0.1.0 HANSA

Medical

None

Obtained blood sample for CBC and Chemistries, EEHV study and endocrine assay.

0.1.0 HANSA

Medical

None

Hansa still not feeling well, slightly lethargic. Seemed to be slightly constipated, stools a bit dry. Encouraged her to drink water and attempted to get medications into her without much success. She refused to eat the psyllium powder this a.m. and was suspicious of the Banamine paste this p.m. Decided to keep her in tonight as temperatures are supposed to drop below 50o.

20073

0.1.0 BAMBOO

Medical

None

Treatment -- Treatment-Soak tail in warm dilute chlorhexidine solution (1 oz/gallon) for five minutes; intermittently scrub affected areas to thoroughly clean in cracks; remove any overgrowth of skin, especially around tail hair follicles, rinse tail with water and apply liberal amounts of alpha-hydroxy lotion to affected area, 10 of 170--Completed by maluy. Comment -- No remarkable change in condition; administration routine.

0.1.0 BAMBOO

Medical

None

Treatment -- 5059 IU(500 IU/ml) of emcelle tocopherol (10 ml) daily until further notice, 290 of 1410--Completed by maluy. Comment -- No remarkable change in condition; administration routine.

0.1.0 BAMBOO

Medical

None

Obtained blood sample for EEHV study.

21113

0.1.0 CHAI

Medical

None

Treatment -- Dosage decreased on 24 Apr 2007 to 35000 IU (500 IU/ml) of Alpha Tocopherol, 70 ml daily., 42 of 367--Completed by maluy. Comment -- No remarkable change in condition; administration routine.

0.1.0 CHAI

Medical

None

Obtained blood sample for EEHV study and endocrine assay.

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ELEPHAS MAXIMUS (no subsp)
Asiatic elephant
Name: HANSA

Sex: Female
Age: 6Y 8M 11D

Acc. #: 200337
Birth: 3.Nov.2000

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Clinical Note:

7.Jun.2007

Problem: colic (Suspected); EXAMINATION, RECHECK
AM progress report from curator- appetite and fecal output decreased yesterday and overnight. Stool is both formed and soft-formed this morning from overnight- first time the stool has been soft. Refusing all oral medications and supplements. Transient oral mucous membrane hyperemia yesterday afternoon, which resolved by late afternoon and is not present this AM. For the past week there has been a waxing and waning of symptoms from periods of listlessness to alert and playful. Appetite has become more selective in the past 48 hours, preferring produce over hay and formulated bisquit. Water intake seemed adequate 48 hours ago but decreased yesterday.

Examination, recheck (9AM)- quiet and listless initially, then was more alert and playing some with boomer ball. Oral mm light pink, small area (1-2cm diameter) of dark discoloration at distal tip of tongue (possibly pigment). Patient was cooperative for produce treats and opening of mouth; very active and resistant of injections administered in the restraint device.

P: Enema- warm water enema administered for hydration

Begin parenteral medications

Benzethine Penicillin G + Procaine Penicillin G 10.5 x 10⁶ IU IM in right hamstring muscles

Flunixin meglumine 2000mg (of 2500mg) IM in two sites in left hamstring muscles.

Fecal occult blood- negative

Fecal parasite screen

Fecal culture for enteric pathogens

Called PHX lab for add-on Leptospirosis serology

Collect urine tomorrow for Lepto PCR

Recommend repeat warm water hydration enema 1-2 more times today.

To begin omeprazole equine paste in case of gastric ulcer (JEO)

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ELEPHAS MAXIMUS (no subsp)	Sex: Female	Acc. #: 200337
Asiatic elephant	Age: 6Y 8M 11D	Birth: 3.Nov.2000
Name: HANSA		

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Clinical Note: 8.Jun.2007

Clinical Note: 8.Jun.2007
Problem: colic (Suspected); DEATH (SPONTANEOUS) (Confirmed)
Found dead in barn in morning. Liquid diarrhea with melena present (JEO)

Medical History Report - Summary for Individual Specimen
WOODLAND PARK ZOOLOGICAL GARDENS

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ELEPHAS MAXIMUS (no subsp)           Sex: Female           Acc. #: 200337
Asiatic elephant                     Age: 6Y 7M 3D        Birth: 3.Nov.2000
Name: HANSA
Time in this collection: > 30 days (2408 days)
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Baseline Data >>>

Specimen Died: 8.Jun.2007

Pathology Case Number: 2007-0071

(Necropsy Record)

Death was spontaneous

Enclosure: ELI3

Reproductive History: No Opportunity for Breeding

Recent History and Observations >>

Spontaneous death following an approximately 8-day history of mild signs of colic. Antemortem bloodwork and fecal cytology WNL. EEHV PCR negative. Fecal bacterial culture and EEHV antibody titers pending at the time of death. Assisted in postmortem exam by WPZ associate vet Dr. John Ochsenreiter, Oregon Zoo senior vet Dr. Mitch Finnegan, vet pathologist Dr. Mike Garner.

Necropsy Report >>

Prosector: KELLY HELMICK, DVM

Necropsy Date: 8.Jun.2007

Death to Necropsy Interval: 6-24 hours

Necropsy Location: ELEPHANT BARN

Photographs obtained during gross necropsy.

Tissue and other samples saved:

in formalin based fixative

in freezer/Ultrafreezer

Carcass Disposition: incinerated Petland

Gross Examination Report >>

General condition: Good body flesh, skin intact, no wounds or lesions.

Body cavity: A small amount (approximately 250ml) of clear straw-colored fluid was present in the peritoneal cavity. There was significant edema of the mesenteric root, from the dorsal attachment to the duodenal flexure and along the curvature of the stomach. Mesentery within this edematous region contained areas of ecchymotic hemorrhage. Coalescing areas of mesenteric hemorrhage was noted along the mesenteric border of the small intestine. There was a pedunculated mass of necrotic fat in the RT caudal retroperitoneal space.

Endocrine: Mild to moderate lymph node enlargement was observed in the retropharyngeal, prescapular, inguinal, and mesenteric nodes. Nodes had hemorrhagic corticomedullary borders with white foci of discoloration. The mesenteric nodes appeared more hemorrhagic and oozed blood on cut surface.

Medical History Report - Summary for Individual Specimen
WOODLAND PARK ZOOLOGICAL GARDENS

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Cardiac: The endometrial surface contained large areas of ecchymotic hemorrhage, including the papillary muscles. Lesions were marked in the LT ventricle and mild in the RT ventricle.

Respiratory: There was a small amount of white foam in the terminal bronchioles.

Hepatic: The majority of the liver was enlarged to approximately 4x normal size, congested, with hemorrhage on the capsular surface. The dorsal LT liver lobe appeared normal in size and consistency.

Gastrointestinal: From the duodenum to the rectal colon, the intestinal tract was edematous with serosal petechiation, mucosal ecchymotic hemorrhage, and mucosal pseudomembrane formation. A small amount of formed stool was noted in the upper colon, but the majority of digesta was brown liquid. The upper small intestine contained multiple punctate mucosal lesions appearing as focal (0.5-0.75 cm) dark black depressions. The stomach mucosa was diffusely erythemic and contained dark brown watery fluid.

Urinary: Both kidneys contained hemorrhage along the corticomedullary junction, with lesions more pronounced in the RT kidney. There was milky white fluid in the renal pelvis consistent in appearance with fluid contained in the bladder (presumptive urine); cytology on this fluid did not identify any organisms or abnormal cells. There was petechiation of the bladder mucosa.

Reproductive: The uterine mucosa was edematous with diffuse erythema. There was a small amount of milky white fluid contained within the uterine lumen.

Gross Diagnoses >>>

WHOLE BODY, DEATH, SPONTANEOUS

Laboratory Samples Submitted >>>

to NWZooPath/formalin: adrenal gland, aorta, bone with marrow, brain, cecum, colon, diaphragm, esophagus, eye, heart, hemal node, kidney, large intestine, liver, lung, mammary gland, skeletal muscle, nerve, omentum, pancreas, pituitary gland, skin, small intestine, spinal cord, spleen, stomach, temporal gland, thymus, thyroid gland, tongue, trachea, trunk, bladder, uterus, vagina, liver, spleen.

tissues/held frozen: as listed above

to SSP pathologist: slides will be forwarded from NWZooPath

to NZP for EEHV (SSP request): heart, liver, spleen, tongue

Medical History Report - Summary for Individual Specimen
WOODLAND PARK ZOOLOGICAL GARDENS

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to NVSL for M tuberculosis culture screening (SSP request):
prescapular ln, pharyngeal ln, lung, trunk wash

to U WI for Johne's culture screening: mesenteric ln, ileocecal-colic
junction

urine/PHX - UA, UPC, UC

abdominal fluid/PHX - cytology, aerobic/anaerobic culture

GI fluid (stomach, small intestine, cecum, high (proximal) colon, low
(distal) colon)/PHX - cytology, aerobic/anaerobic culture, viral EM, VI

tissues samples/swabs (small intestine, cecum, liver, kidney, colon,
uterus)/PHX - for aerobic and anaerobic culture

parasite? from GI/in alcohol to WADDL for ID

Other Laboratory Results >>>

WHOLE BODY, VASCULITIS, POLYMERASE CHAIN REACTION, HERPESVIRUS

Histopathology Examination Data >>>

Outside Laboratory Case Reference Number G07-2648

Histopathology Report >>

Northwest ZooPath

654 W. Main St. ?Monroe, WA 98272 ?

Phone (360) 794-0630 ??Fax (360) 794-4312 ?E-mail: zoopath@aol.com

Case No.: G07-2648 Tissues obtained: 06/09/07

Received: 06/12, reported 06/19/07

Dr. Kelly Helmick Patient ID: Asian Elephant #200337
("Hansa")

Woodland Park Zoo Account #: WA 360G, NM, ATT

Animal Health Department Telephone: (206) 684-4872

601 N. 59th St. FAX #: 684-4873

Seattle, WA 98103-5858 E-mail: (on file)

HISTORY: This 7-year-old female Asian elephant had soft stools one day prior to death, and signs suggestive of colic. The elephant did not respond to supportive care and died. Antemortem fecal occult blood test was negative. Antemortem PCR testing of whole blood was negative for Asian elephant endotheliotropic herpesvirus. Necropsy revealed generalized reddening and mild enlargement of the lymph nodes. Approximately two liters of straw colored fluid were in the abdominal cavity. Marked edema was noted in the mesenteric root.

Medical History Report - Summary for Individual Specimen
WOODLAND PARK ZOOLOGICAL GARDENS

Petechiae were noted throughout the serosal surfaces of the gut. Foci of punctate reddening and ulceration were noted throughout the small intestine and proximal aspect of the large intestine. Marked thickening of the intestinal wall due to edema and congestion was noted throughout the alimentary tract. Some petechiae were noted on serosal and cut surfaces of the kidney, and a white fluid was present in some of the renal pelvises (urine). The ovaries were inactive, and the uterus had a slight exudate of mucoid material. The lungs were congested. The heart had extensive petechiae and ecchymoses on the epicardial and serosal surfaces. The urinary bladder had petechiae on the serosal surfaces and mucosal surfaces. The liver was congested and slightly swollen. Representative sections of all tissues were fixed in formalin for histopathology. Select tissues were frozen for future reference and fixed in glutaraldehyde for electron microscopy.

CLINICAL DIAGNOSIS: open

GROSS: Received in formalin are multiple tissues that are processed in 20 blocks following appropriate decalcification of block #20.

MICROSCOPIC: Blood vessels: Blood vessels throughout all specimens, especially the uvea, alimentary tract, kidney, and liver, have varying degrees of endothelial cell hypertrophy or necrosis, edema or fibrin degeneration of the vessel wall, thrombosis, and perivascular edema or hemorrhage. Affected vessels include capillaries, small veins and venules, small arteries, and arterioles. Occasionally, especially in the renal medulla and uvea, endothelial cells contain variably sized, singular, eosinophilic or smudged intranuclear inclusions. Spleen: In addition to the vascular changes, the red pulp is congested, and some small foci of hemorrhage or fibrin deposition are noted. Adrenal: A few small foci of necrosis and hemorrhage are in the cortex, and some fibrin thrombi are noted in blood vessels. Pancreas: A few small foci of hemorrhage in the acinar tissue. Uterus: The mucosa is edematous and congested, and a mild infiltrate of neutrophils and lymphocytes is noted in the lamina propria. Mesentery: The mesentery and omentum have marked edema. Alimentary tract: In addition to the vascular lesions, numerous foci of hemorrhage and necrosis (acute infarcts) are present throughout the small and large intestines and are associated with extensive bacterial overgrowth in the colon. Brain: The meninges and Virchow's spaces of the brain at various levels are edematous or suffused with extravasated blood. Heart: Extensive hemorrhage is present throughout the epicardium and endocardium, occasionally associated with mild neutrophilic inflammation, and this process extends a short distance into the myocardium in some areas. Lung: The parenchyma is congested, edematous, and few blood vessels contain fibrinocellular thrombi.

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G07-2648, Asian Elephant #200337 ("Hansa")
Woodland Park Zoo

Lymph node: Seven lymph nodes are congested and have hemorrhage in the sinuses with occasional erythrophagocytosis. Liver: The parenchyma is congested, occasionally suffused with extravasated blood, and bile stasis is noted in hepatocytes, canaliculi, and ductules. Mild random multifocal neutrophilic hepatitis is noted. Kidney: Mild multifocal tubulointerstitial infiltrates of lymphocytes and neutrophils are noted, particularly in areas where vascular damage is prominent. Skeletal muscle: Mild rhabdomyolysis is noted in one section of skeletal muscle and in three sections of the tongue. The following tissues are histologically within normal limits: skin, adipose, esophagus, pituitary, urinary bladder, bone marrow, and bone.

DIAGNOSIS: Systemic vascular degeneration, necrosis, thromb associated hemorrhage or edema, associated with occasional endothelial cell intranuclear inclusions.

COMMENT: Histologic changes in this case are consistent w systemic infectious disease process. The morphologic features of this lesion are most consistent with endotheliotropic herpesvirus infection, and the vascular damage associated with this event accounts for the gross and histologic changes in the tissues, and is the cause of death. The failure to detect known endotheliotropic herpesviruses of elephants using PCR suggests that this may be a different virus that has not been characterized. Immunohistochemistry, PCR, and electron microscopy are pending to further characterize the agent, and addendums will follow as these results become available. This elephant was in excellent nutritional status and had no detectable underlying disease processes at gross examination or in the histologic sections. These findings suggest that this is likely a primary infectious agent and highly virulent. The bacterial overgrowth in the colon is a secondary process associated with infarction of the gut due to the underlying vascular lesions. As per protocol and per your request, Recuts have been forwarded to the SSP pathologist, Dr. Scott Terrell.

Michael M. Garner, DVM, Dipl. ACVP
MMG/hc
E-mail: Zoopath@aol.com
NZIP Code: M, 9d; systemic viral vasculitis, herpesvirus-like.
Cc// Dr. Scott Terrell, SSP Pathologist

Medical History Report - Summary for Individual Specimen
WOODLAND PARK ZOOLOGICAL GARDENS

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Addendum, 7/11/07: Attempts to find inclusions in the EM fixed kidney were unsuccessful, probably because the tissue represents cortex, and the inclusions are most numerous in the medulla. Wet choroid, a recut of the eye section, and the block with eye tissue (block 19) have been forwarded for EM, as the inclusions in the vessels of the choroid are fairly numerous.

Cause of Death >>>

VASCULITIS, WHOLE BODY, HERPESVIRUS

Pathologist: MIKE GARNER, DVM

Additional Comments >>>

IHC and EM pending

Memorandum



May 21, 1998

Page 2 of 3

capability. Chai's biological clock is ticking, and the bulls being brought in will probably not be of breeding age. If we opt to wait for this, it could be eight years before we breed. It was also generally agreed that, as far as acquiring one of these salvage animals goes, other institutions are better equipped for bringing in young, wild-born animals than we are.

Worst-case scenarios and possible down-sides were also discussed:

- There is always a risk in transporting an elephant.
- Stress could prevent conception or live delivery.
- Infant mortality among elephants is about 25-30 percent. However, Janis said that the preferred protocol for births now is to induce the cows at the first signs of labor. This method seems to improve the odds significantly.
- There is the issue of the herpes virus that killed several baby elephants over the last few years. It's possible that Chai could bring the virus back into our collection. On the other hand, it's also possible that the virus is latent and endemic and is already in our elephants. Great strides have been made in treating the virus, and our chances of saving a baby elephant with the virus is much better now.

It was decided that the plusses (a baby elephant) outweighed the negatives (see above), but it's important to identify and be prepared to answer questions or criticism in the event that the worst happens. Janis pointed out that the population is so small, the choices are to do nothing and not help the situation or to take the risk.

Dave asked if there was any value to our becoming a holding facility for older elephants. While there may be some value, there is a problem in not enough zoos are committing to breeding and few zoos have the facilities for breeding. We are better off financially than many and would probably be better serving elephants and the SSP's goals by breeding the young cows we have. If we aren't going to breed them, we should send them somewhere that will. In that event, we would be looking at taking in older animals who may not be compatible with Bamboo and Watoto in a building that really isn't set up for animals that don't get along. Janis pointed out that the odds of somebody sending us a really good, healthy, tractable cow probably aren't too good. We are looking at a total commitment of \$45-\$60K including the stud fee, shipping, staff costs, modifications to the present elephant barn. Dave Towne said "go for it." We will try to get a 50K-65K allocation from the City Council.

Pat asked when we can start making commitments. If we go to the City for funding, it will probably be two months before we get the money. Mike thought we could structure the financing to pay for the crate costs now out of the operating budget and do a reimbursement later.

October 19, 2007

John Houck, Deputy Director
Point Defiance Zoo & Aquarium
5400 N. Pearl St.
Tacoma, WA 98407

VIA CERTIFIED MAIL

Dear Mr. Houck:

This is a request being made under the Washington Public Records Act (RCW 42.56). We are requesting copies of the following records:

- All documentation relating to communications about herpes viruses or herpes testing regarding all elephants owned or kept by PDZA including Suki, Hanako, Cindy and Bamboo from 1995-present including but not limited to keeper documentation, notes, memos, letters, e-mails, medical records including lab reports, medication records, necropsy reports, etc.
- All documentation relating to Bamboo's transfer and residence at PDZA including but not limited to correspondence, memos, notes, e-mails, keeper documentation, medical records, etc. and all documentation relating to the decision to return Bamboo to Woodland Park Zoo in 2006 including but not limited to correspondence, memos, notes, e-mails, keeper documentation, medical records, etc.

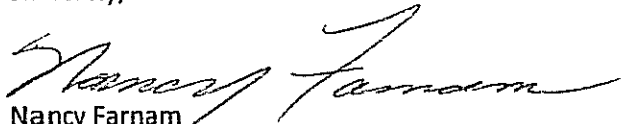
If you have any questions regarding any aspect of this request, please contact me by telephone rather than by mail in order to expedite timely disclosure.

Please confirm receipt of this request by e-mail to n_farnam@yahoo.com.

Please mail copies of the records to the address below.

Thank you for your prompt response to this request as required by the Public Records Act.

Sincerely,



Nancy Farnam
Co-Coordinator, Friends of Woodland Park Zoo Elephants
Northwest Animal Rights Network
8005 194th Place SW
Edmonds, WA 98026
(425) 775-6979