SCHOOL OF MEDICINE
OFFICE OF THE MEDICAL INVESTIGATOR

DEATH INVESTIGATION SUMMARY - AMENDED

Case Number: 2018-03102

HERNANDEZ RODRIGUEZ, ROY ALEXANDER

County Pronounced: Bernalillo
Law Enforcement:
Agent:
Date of Birth: 2/18/1985
Pronounced Date/Time: 5/25/2018 3:32:00 AM
Central Office Investigator: Aeris Alexandros
Deputy Field Investigator: Aeris Alexandros COI

Disclaimer: Cause and/or manner of death may have changed. See amendment.

CAUSE OF DEATH

Multicentric Castleman disease

Due to

Acquired immunodeficiency syndrome

MANNER OF DEATH

Natural

Kurt Nolte MD

Chief Medical Investigator, Professor of Pathology and Radiology

All signatures authenticated electronically

Date: 4/8/2019 2:34:18 PM

DECLARATION

The death of HERNANDEZ RODRIGUEZ, ROY ALEXANDER was investigated by the Office of the Medical Investigator under the statutory authority of the Office of the Medical Investigator.

I, Kurt Nolte MD, a board certified anatomic and forensic pathologis licensed to practice pathology in the State of New Mexico, do declare that I personally performed or supervised the tasks described within this Death Investigation Summary document. It is only after careful consideration of all data available to me at the time that this report was finalized that I attest to the diagnoses and opinions stated herein.

Numerous photographs were obtained along the course of the examination. I have personally reviewed those photographs and attest that they are representative of findings reported in this document.

This document is divided into 10 sections with a final Procedural Notes section:

1. Summary and Opinion
2. External Examination
3. Medical Intervention
4. Postmortem Changes
5. Evidence of Injuries
6. Internal Examination
7. Neuropathology
8. Microscopy
9. Postmortem Computed Tomography
10. Other

Should you have questions after review of this material, please feel free to contact me at the Office of the Medical Investigator (Albuquerque, New Mexico) - 505-272-3053.

Medical Investigator | **Medical Investigator Trainee**

Kurt Nolte MD

Last Date Saved: 4/17/2019 4:57:29 PM

Amendment:

The following dates in the summary and opinion section are amended as follows:
- First paragraph- date taken into federal custody should read May 11, 2018
- Fourth paragraph- date feeling better should read May 20, 2018
- Fifth paragraph- date lumbar puncture was performed should read May 22, 2018
- Sixth paragraph- date when there was pancytopenia and the hematocrit dropped to 20.2% should read May 23, 2018
- Seventh paragraph- date when she had the first of a series of at least 10 cardiac arrests should read May 24, 2018. Date when platelet count fell to 59,000/microliter should read May 25, 2018

Medical Investigator Kurt Nolte MD

Medical Investigator Trainee

SUMMARY AND OPINION

Pathologic Diagnoses

-Acquired immunodeficiency syndrome
  -Human herpesvirus-8 (HHV-8) positive multicentric Castleman disease (Tricore Reference Laboratory & CDC reports)
    -Lymphadenopathy, paratracheal and hilar regions
    -Splenomegaly
    -Diffuse alveolar damage
    -Anasarca
    -Multiple cardiac arrests with successful resuscitations
      -Acute hypoxic-ischemic encephalopathy & diffuse cerebral edema
      -Fractures, anterior ribs and sternum, resuscitative
  -Epstein-Barr virus (EBV) associated lymphoproliferative disorder
  -Kaposi's sarcoma
  -Ulcer, esophagus, shallow

-Left occipital subcutaneous scalp hematoma, small, by CT scan
-Dilated lacteal, jejunum, incidental
-Probe patent foramen ovale, incidental

Opinion

This 33 year old transgender woman, Roy Alexander Hernandez Rodriguez, (with a preferred name of Roxsana Hernandez and also known as Jeffry Hernandez, Jeifri Hernandez-Rodriguez, and Yenfri Hernandez-Rodriguez) was taken into federal custody in California on May 11, 2017. At that time, she was ill with cough, congestion and fever. There was a history of an untreated human immunodeficiency virus (HIV) infection for 5-6 months. She was diagnosed with bronchitis at a Scripps Care Clinic on May 12, 2018 and given antibiotics. She was then transferred to New Mexico on May 16, 2018 for incarceration.

On intake medical screening within 12 hours of arrival, she was noted to be ill and was sent to the Cibola General Hospital Emergency Room in Grants, NM where she complained of fever, cough, sore throat, abdominal pain and vomiting. She was noted to be hypotensive, tachycardic, tachypneic, febrile, hypoxemic, anemic (hematocrit 25.3%) and thrombocytopenic (platelet count 69,000/microliter). A prothrombin time was elevated at 15.7 seconds. The d-dimer concentration was markedly elevated at 449 ng/ml. A rapid Strep test, throat culture, and blood cultures were negative. HIV infection was confirmed by testing for HIV antibodies. A computed tomography (CT) scan showed numerous pulmonary micronodules and enlarged hilar and mediastinal lymph nodes. Her clinicians thought she was in septic shock with an untreated HIV infection, dehydration (blood urea nitrogen 26 mg/dl, creatinine 1.0 mg/dl) and emaciation/starvation (albumin 2.2 g/dl). She was treated with antibiotics and fluids and was transferred to Lovelace Medical Center-Downtown in Albuquerque, NM on May 17, 2018.

At Lovelace Medical Center-Downtown, she indicated that she was originally from Honduras but had been living in Mexico since she was 19 years old. She had cough and an unintentional 30 lb weight loss for 2 months while she was traveling through Mexico to the US, and fever for 2 weeks. There was cervical and inguinal lymphadenopathy. She was diagnosed with an untreated HIV infection, sepsis requiring vasopressors for hypotension, and malnutrition. An abdominal CT scan showed splenomegaly. A CT scan of the chest showed clear lungs, small pleural effusions, and bilateral axillary lymphadenopathy. A test for Treponema pallidum antibody was positive and an RPR was positive with a titer of 1:32. She was treated for syphilis. By May 19, 2018 the blood urea nitrogen and creatinine had normalized. A prealbumin concentration was low at 5.1 mg/dl. Tests for hepatitis B surface antigen and hepatitis C antibody were negative. A test for HIV viral load showed 744,000 copies/ml. The CD4 count was 189 cells/cubic millimeter and she was started on Bactrim to cover for Pneumocystis carinii pneumonia. A CT scan of the neck showed bilateral lymphadenopathy. A QuantiFERON TB GOLD test was negative. A test for Cryptococcus antigen was negative. A

urine Histoplasma antigen test was negative. An Ebstein Barr virus panel showed prior exposure while a Monospot test was negative. Tests for Cytomegalovirus antibodies were negative for IgM and positive for IgG. Blood cultures from Cibola General Hospital were negative after 5 days. Sputum cultures were negative. Toxoplasmosis antibodies were negative. A malaria screen of a blood smear was negative.The lymphadenopathy was thought to be potentially secondary to the HIV infection. A nasopharyngeal swab was negative for influenza viruses, adenovirus, respiratory syncytial virus (RSV), rhinovirus, metapneumovirus, and parainfluenza viruses by PCR. On May 20, 2019 she was feeling better.

On May 21, 2018, she underwent an excisional biopsy of a right axillary lymph node which was later reported as demonstrating multicentric Castleman disease.

Neurosyphilis was considered. A lumbar puncture on May 22, 2019 showed a white blood cell count of 9 with 90% lymphocytes and a protein of 34. A VDRL on cerebrospinal fluid was non-reactive. Her fevers persisted.

On May 23, 2019, there was pancytopenia with a hematocrit that dropped to 20.2% and continued thrombocytopenia. She was transfused with red blood cells and platelets. She developed anasarca.

On May 24, 2018, she complained of shortness of breath. She underwent bilateral thoracentesis for expanded pleural effusions the same day. The left pleural fluid contained 490 white blood cells/microliter of which 16% were neutrophils and 46% were lymphocytes. The right pleural fluid had a similar count with 15% neutrophils and 65% lymphocytes. No organisms were seen. A malaria smear was negative. Fibrinogen was normal. A d-dimer concentration was elevated at 10.82 microgram/ml FEU. Abdominal distention with abdominal pain on palpation was noted. She demonstrated respiratory failure and was emergently intubated. The liver enzymes became elevated. The hematocrit was 22.5% and the platelet count was 105,000/microliter. She was transfused with more red blood cells. Another abdominal CT scan showed anasarca with moderate bilateral pleural effusions and moderate ascites and splenomegaly. The evening of May 24, 2019, she had the first of a series of at least 10 cardiac arrests with successful resuscitations until she was pronounced dead on May 25, 2018. On May 25, 2019 the platelet count had fallen to 59,000/microliter.

At autopsy, there was diffuse alveolar damage. The spleen and the lymph nodes in the chest were enlarged. Hematopathology consultants reviewed the antemortem lymph node biopsy, confirmed the diagnosis of multicentric Castleman Disease, and identified focal lymph node involvement by Kaposi's sarcoma. The multicentric Castleman Disease and Kaposi's sarcoma were associated with a human herpesvirus 8 (HHV-8) infection. Kaposi's sarcoma in the presence of HIV antibodies is an acquired immunodeficiency syndrome (AIDS) defining condition. The hematopathology consultants also identified an independent Epstein-Barr virus associated lymphoproliferative disorder.

An evaluation of autopsy tissues by the Infectious Disease Pathology Branch at the Centers for Disease Control and Prevention (CDC) confirmed the diagnosis of multicentric Castleman disease and identified positive staining for both HHV-8 (pancreas, spleen, lymph node, lung) and HIV (lymph node) infections. CDC testing excluded infection by hantavirus, Leptospira species, influenza viruses, parainfluenza viruses, and RSV. CDC testing also excluded infection by bacteria and fungi in lung tissues.

A small occipital scalp hematoma was seen by computed tomography (CT) scan. The origin of this injury is unknown. There were fractures of multiple ribs and the sternum from cardiopulmonary resuscitation attempts. No other injuries were observed.

A neuropathologic exam showed mild to moderate acute hypoxic-ischemic changes and mild diffuse cerebral edema likely secondary to the multiple cardiac arrests with successful resuscitations. There was no evidence of HIV/AIDS encephalopathy or an opportunistic HIV-related brain infection.

A culture of stool was negative for Yersinia enterocolitica, Escherichia coli O157:H7, and Campylobacter and Salmonella species. Stool was negative for Shiga toxin by PCR. Stool was negative for Giardia lamblia and Cryptpsporidium by an enzyme immunoassay method.

The cause of death is best classified as multicentric Castleman disease due to acquired immunodeficiency syndrome. HHV-8 associated multicentric Castleman disease usually occurs in individuals with HIV infections and a weakened immune system. These individuals can develop a severe form of the disease that is rapidly progressive and lead to death within weeks such as seen in this decedent. Multicentric Castleman disease can present with a variety of nonspecific symptoms and signs reflective of an inflammatory process that include fever, night sweats, enlarged lymph nodes, loss of appetite and weight loss, shortness of breath, enlarged liver and spleen, pancytopenia, peripheral neuropathy, hypoalbuminemia, and skin rash. The decedent manifested most of these findings.

The manner of death is natural.

Medical Investigator	Medical Investigator Trainee
Kurt Nolte MD	

External exam date time:	5/26/2018 10:23:00 AM
Authority for examination:	OMI
ID confirmed at time of exam:	Yes
Means used to confirm identity:	Photo
Other verification means:	
Location of orange bracelet:	Left wrist
Name on orange bracelet:	Decedent name
Other name on orange bracelet:	
Location of green bracelet:	Left wrist
Name on green bracelet:	Decedent name
Other name on green bracelet:	
Hospital ID tags or bracelets?	Yes
If yes specify stated name and location:	Left wrist- decedent name
Body length (cm):	164.00
Body weight (kgs):	60.00
BMI:	22.31

Development:	Well-developed
Development comments:	
Stature:	Well-nourished
Age:	Appears to be stated age
Anasarca:	No
Edema localized:	No
Dehydration:	No
Scalp hair color:	Blonde
Scalp hair color comments:	

French braids with pigtails

Scalp hair length:	Long
Eyes:	Both eyes present
Irides:	Brown
Eyes corneae:	Translucent
Eyes sclerae:	White
Eyes conjunctivae:	Translucent
Eyes petechiae:	No
Palpebral petechiae:	No
Bulbar petechiae:	No
Facial petechiae:	No

Oral mucosal petechiae:	No
Nose:	Normally formed
Ears:	Normally formed
Lips:	Normally formed
Facial hair:	Stubble in the pattern of a beard and moustache
Facial hair color:	Brown

Facial hair color comments:

sparse hair

Maxillary dentition:	Natural
Mandibular dentition:	Natural
Condition of dentition:	Adequate
Neck:	Unremarkable
Trachea midline:	Yes
Chest development:	Normal
Chest symmetrical:	Yes
Chest diameter:	Appropriate
Abdomen:	Flat
Anus:	Unremarkable
Back:	Unremarkable
Spine:	Normal
External genitalia:	Male
Breast development:	None
Breast masses:	None
Right hand digits complete:	Yes
Left hand digits complete:	Yes
Right foot digits complete:	Yes
Left foot digits complete:	Yes
Extremities:	Well-developed and symmetrical

Extremities comment:

pink toenail polish
slight edema

Muscle group atrophy:	No
Senile purpura:	No
Pitting edema:	Yes
Muscle other:	No

Tattoo(s)

Tattoos present: No

Cosmetic Piercing(s)

Cosmetic piercing present: No

Scar(s)

Scar(s) present: Yes

Scar anterior chest:	Yes
Scar right hand:	Yes
Scar left hand:	Yes
Scar right knee:	Yes
Scar left thigh:	Yes
Scar left knee:	Yes

Reporting Tracking

Reported by:	
Verified by:	Kurt Nolte MD on 6/7/2018 1:40:12 PM
Reviewed and approved by:	Kurt Nolte MD on 4/8/2019 2:35:41 PM

Medical Investigator	Medical Investigator Trainee
Kurt Nolte MD	

Evidence of medical intervention: Yes

Indwelling Tubes

If nasogastric tube present, specify course and position:	No
If endotracheal tube present, specify course and position:	No
Tracheostomy site/tube:	No
Mediastinal tube(s):	No
Chest tube(s):	No
If Foley catheter present, specify course and position:	No

Medical intervention other:

bandages over needle punctures, right forearm, right groin, left arm

Sutured wound with covering bandage in right axilla

CPR abraded contusions over sternum

Electrocardiogram (ECG) Monitoring Pads

ECG Monitoring Pads Present?: No

Defibrillator Pads

Defibrillator pads present?: No

Vascular Catheter(s):

Vascular catheter(s): No

Recent Surgical Intervention

Evidence of recent surgical intervention: No

Report Tracking

Reported by:	
Verified by:	Kurt Nolte MD on 1/24/2019 11:01:15 AM
Reviewed and approved by:	Kurt Nolte MD on 4/8/2019 2:35:41 PM

Medical Investigator	Medical Investigator Trainee
Kurt Nolte MD	

External exam date:	5/26/2018 10:19:00 AM
Body temperature:	Cool subsequent to refrigeration
Rigor mortis:	Fully fixed
Livor mortis - color:	Purple
Livor mortis - fixation (if applicable):	Partially fixed
Livor mortis - position (if applicable):	Posterior
State of preservation:	No decomposition

Report Tracking

Reported by:	
Verified by:	Kurt Nolte MD on 5/26/2018 10:21:38 AM
Reviewed and approved by:	Kurt Nolte MD on 4/8/2019 2:35:41 PM

Medical Investigator

Kurt Nolte MD

Medical Investigator Trainee

Are there any injuries: Yes

Evidence of Injury:

Autopsy date: 6/7/2018 12:58:00 PM

#	Injury	Location	Injury Description
1	Blunt injury	Head	See Computed Tomography (CT) section

Report Tracking

Reported by:

Verified by: Kurt Nolte MD on 3/15/2019 11:03:36 AM

Reviewed and approved by: Kurt Nolte MD on 4/8/2019 2:35:41 PM

Medical Investigator	Medical Investigator Trainee
Kurt Nolte MD	

Date of Autopsy:	6/7/2018 12:58:00 PM
Date of Internal Exam:	6/7/2018 1:01:00 PM

BODY CAVITIES

Chest cavities examined:	Yes
See evidence of injury section	No
Organs in normal anatomic position	Yes
Other organ position comments	
Diaphragm:	Intact
Serosal surfaces:	Smooth and glistening
Body cavity adhesions present:	No
Fluid accumulation present:	Yes
Fluid accumulation right chest cavity:	Yes
Fluid accumulation left chest cavity	Yes
Fluid accumulation pericardial sac:	No
Fluid accumulation abdominal cavity:	Yes
Fluid accumulation pelvis:	No

Fluid accumulation comments:

200 ml clear pink fluid each chest cavity
300 ml similar fluid abdominal cavity

HEAD

Brain examined:	Yes
See separate forensic neuropathology consultation report	Yes
See evidence of injury section:	No
See evidence of medical Intervention section:	No
See postmortem changes section:	No
Brain fresh (g):	1300
Brain fixed (g):	1295
Facial skeleton:	No palpable fractures
Calvarium:	No fractures
Skull base:	No fractures
Skull comments:	

Spinal Cord

Spinal cord examined:	No

Middle Ears

Middle ears examined:	No
Neck	
Neck examined:	Yes
See Evidence of Injury section:	No
See Evidence of Medical Intervention section	No
See Postmortem Changes section:	No
Subcutaneous soft tissues:	Unremarkable
Strap muscles:	Unremarkable
Jugular veins:	Unremarkable
Carotid arteries:	Unremarkable
Tongue:	Unremarkable
Epiglottis:	Unremarkable
Hyoid bone:	Unremarkable
Larynx:	Other - See comments
Palatine tonsils:	Not examined
Other neck comments:	edema in aryepiglottic folds approximately 1 cm area of hemorrhage in laryngeal mucosa
CARDIOVASCULAR SYSTEM	
Heart examined:	Yes
See separate Cardiovascular Pathology report:	No
See Evidence of Injury section:	No
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No
Heart	
Right coronary ostium position:	Normal
Left coronary ostium position:	Normal
Supply of the posterior myocardium:	Right coronary artery
Heart fresh (g):	250.0
Heart fixed (g):	
Coronary artery stenosis by atherosclerosis (in percent):	
Right coronary ostium:	0
Proximal third right coronary artery:	0
Middle third right coronary artery:	0
Distal third right coronary artery:	0
Left coronary ostium:	0
Left main coronary artery:	0
Proximal third left anterior descending coronary artery:	0
Middle third left anterior descending coronary artery:	0

Distal third left anterior descending coronary artery:	0
Proximal third left circumflex coronary artery:	0
Middle third left circumflex coronary artery:	0
Distal third left circumflex coronary artery:	0

Cardiac Chambers and Valves:

Cardiac chambers:	Unremarkable
Tricuspid valve:	Unremarkable
Pulmonic valve:	Unremarkable
Mitral valve:	Unremarkable
Aortic valve:	Unremarkable
Right ventricular myocardium:	No fibrosis, erythema, pathologic infiltration of adipose tissue or areas of accentuated softening or induration
Left ventricular myocardium:	No fibrosis, erythema, or areas of accentuated softening or induration
Atrial septum:	Other - See comments
Ventricular septum:	Unremarkable

Other septal comments:

2-3 mm diameter probe patent foramen ovale

Aorta

Aorta examined:	Yes
Orifices of the major vascular branches:	Patent
Coarctation:	No
Vascular dissection:	No
Aneurysm formation:	No
Complex atherosclerosis:	No
Other aortic pathology:	No

Vena Cava

Great vessels examined:	Yes
Vena cava and major tributaries:	Patent

RESPIRATORY SYSTEM

Lungs examined:	Yes
See separate Cardiovascular Pathology report:	No
See Evidence of Injury section:	No
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No
Lung right (g):	1240
Lung left (g):	1070
Upper and lower airways:	Unobstructed, and the mucosal surfaces are smooth and yellow-tan

Pulmonary parenchyma color:	Dark red-purple
Pulmonary parenchyma congestion and edema:	Marked amounts of blood and frothy fluid
Pulmonary trunk:	Free of saddle embolus
Pulmonary artery thrombi:	None
Pulmonary artery atherosclerosis:	None

HEPATOBILIARY SYSTEM

Liver examined:	Yes
See Evidence of Injury section:	No
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No
Liver (g):	1760
Bile vol (mL):	
Gallstones autopsy:	No
Gallstones autopsy desc:	
Hepatic parenchyma (color):	Pale brown
Hepatic parenchyma (texture):	Unremarkable
Hepatic vasculature:	Unremarkable and free of thrombus
Gallbladder:	Unremarkable
Gallstones:	None
Intrahepatic biliary tree:	Unremarkable
Extrahepatic biliary tree:	Unremarkable

GASTROINTESTINAL SYSTEM

Alimentary tract examined:	Yes
See Evidence of Injury section:	No
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No
Stomach contents vol (mL):	20

Stomach contents description:

thick yellow liquid

Appendix found: Yes

Esophagus

Course:	Normal course without fistulae
Mucosa:	Other - See comments

Other esophageal comments:

smooth grey-white mucosa with 1 x 0.5 cm shallow hemorrhagic ulcer in mid portion

Stomach

Mucosa:	Usual rugal folds
Pylorus:	Patent and without muscular hypertrophy

Small Intestine

Luminal contents:	Partially digested food

Mucosa: Other - See comments

Caliber and continuity: Appropriate caliber without interruption of luminal continuity

Other small intestine comments:

1cm yellow soft mucosal nodule in jeunum

Colon

Luminal contents: Unformed stool

Mucosa: Unremarkable

Caliber and continuity: Appropriate caliber without interruption of luminal continuity

Pancreas

Form: Normal tan, lobulated appearance

GENITOURINARY SYSTEM

Genitourinary system examined: Yes

See Evidence of Injury section: No

See Evidence of Medical Intervention section: No

See Postmortem Changes section: No

Kidneys

Kidneys capsules: Thin, semitransparent

Cortical surfaces: Smooth

Cortices: Normal thickness and well-delineated from the medullary pyramids

Calyces, pelves and ureters: Non-dilated and free of stones and masses

Other kidney comments:

pale brown

Kidney right (g): 130

Kidney left (g): 130

Urine volume (mL): 0

Urine description:

Urinary Bladder

Urinary bladder mucosa: Gray-tan and smooth

Male

Male: Yes

Testicles

Location: Bilaterally intrascrotal

Size: Unremarkable

Consistency: Homogeneous

Other testicle comments:

Prostate Gland

Size: Unremarkable

Consistency: Homogeneous

Other prostate gland comments:

RETICULOENDOTHELIAL SYSTEM

Reticuloendothelial system examined: Yes

See Evidence of Injury section:	No
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No

Spleen

Spleen (g):	555
Spleen parenchyma:	Moderately firm
Spleen capsule:	Intact
Spleen white pulp:	Indiscernible

Bone Marrow

Color:	Red-brown, homogeneous and ample

Lymph Nodes

Regional adenopathy:	Other - See comments

Other lymph node comments:

prominent 1-4 cm paratracheal and hilar lymph nodes

Thymus

Thymus (g):	
Parenchyma:	Absent (involution by adipose tissue)

ENDOCRINE SYSTEM

Endocrine system examined:	Yes
See Evidence of Injury section:	No
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No

Pituitary Gland

Size:	Normal

Thyroid Gland

Position:	Normal
Size:	Normal
Parenchyma:	Homogeneous

Adrenal Glands

Adrenal right (g):	
Adrenal left (g):	
Size:	Normal
Parenchyma:	Yellow cortices and gray medullae with the expected corticomedullary ratio

MUSCULOSKELETAL SYSTEM

Musculoskeletal system examined:	Yes
See Evidence of Injury section:	No
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No
Bony framework:	Unremarkable
Musculature:	Other - See comments

Subcutaneous soft tissues:	Other - See comments
Other musculoskeletal system comments:	anasarca in exposed soft tissues

ADDITIONAL COMMENTS

Report Tracking

Reported by:	
Verified by:	Kurt Nolte MD on 6/7/2018 1:54:19 PM
Reviewed and approved by:	Kurt Nolte MD on 4/8/2019 2:35:41 PM

Medical Investigator | **Medical Investigator Trainee**

Kurt Nolte MD

Summary:

NEUROPATHOLOGIC FINDINGS:
I. Mild to moderate acute hypoxic-ischemic changes.
II. Mild diffuse cerebral edema.
III. Scattered chronic inflammatory infiltrate, leptomeninges.

SUMMARY AND EXPLANATION OF FINDINGS:
The decedent is a 33-year-old man with a medical history significant for AIDS.

Neuropathologic examination demonstrates a macroscopically normal appearing brain with mild cerebral edema. Microscopically, mild to moderate acute hypoxic-ischemic changes are present. Scattered chronic inflammatory mononuclear infiltrates involve the leptomeninges of the hippocampal section and the pons.

Microscopic features of HIV/AIDS encephalopathy are not present (multinucleated giant cells and microglial nodules). Features of opportunistic CNS infections are not identified.

Brain exam date: 6/27/2018 12:00:00 AM
Brain: Yes
Dura: Yes
Other materials available for exam: Pituitary gland
Brain Dissection Method: Cerebrum - coronal
Brain fresh: 1300.00
Brain fresh:
Brain fixed: 1295.00

Evidence of Injury

General Description (External):

Dura mater: Smooth and without massess
Dural venous sinuses: Patent
Cortical bridging vein: Disrupted upon brain removal
Other cortical bridging vein comment(s):
Disrupted upon brain removal
Leptomeninges: Smooth and translucent
Superficial Cortical Vasculature: No thromboses or vascular malformations
Gyral convolution patterns: Within normal limits
Gyral convolutions: Slight widening and flattening
Uncal processes: Not grooved or herniated
Cerebellar tonsils: Not grooved or herniated
Basilar arterial vasculature: Normal
Cranial nerve roots: Normal

General Description (Internal):

Cerebral cortex: Intact and without contusion

Gray-white matter junctions: Distinct

Internal capsule: No neoplasm, cyst, abscess or hemorrhage

Ventricular system: Appropriately configured and not compressed

Deep gray nuclei: No neoplasm, cyst, abscess or hemorrhage

Other comment(s) about the deep gray nuclei:

Hippocampi: No neoplasm, cyst, abscess or hemorrhage

Mammillary bodies: No neoplasm, cyst, abscess or hemorrhage

Superior cerebellar vermis: No neoplasm, cyst, abscess or hemorrhage

Cerebellar parenchyma: No neoplasm, cyst, abscess or hemorrhage

Brainstem structures: No neoplasm, cyst, abscess or hemorrhage

Proximal cervical spinal cord: No neoplasm, cyst, abscess or hemorrhage

Substantia nigra: Normally pigmented

Locus ceruleus: Normally pigmented

Other Tissues Examined

Spinal cord: Other

Other comment(s) about the spinal cord:

The superior cervical spinal cord shows no abnormalities.

Eyes: Not examined

Cervical spine: Not examined

Microscopic Description

The isocortex (left frontal and left occipital) demonstrates normal appearing isocortex with appropriate lamination and morphologically appearing neurons with scattered acute hypoxic-ischemic changes. The subcortical white matter is appropriately myelinated and contains normal appearing supporting glia. Frequent capillaries contain abundant polymorphonuclear cells. The overlying leptomeninges are thickened by collagen strands with scant chronic mononuclear inflammatory cells.

Sections of the left basal ganglia and right thalamus show mild acute hypoxic-ischemic changes. The extreme capsule, claustrum, external capsule and internal capsule are histologically normal. Scattered small vessels demonstrate abundant polymorphonuclear cells. The thalamus demonstrates histologically normal appearing large neurons.

The hippocampus shows mild acute hypoxic-ischemic changes involving CA1, with otherwise normal histology. The leptomeninges show focal chronic inflammatory infiltrate comprised of macrophages and plasma cells.

The pons is histologically and structurally normal, with normal appearing pontine nuclei, corticospinal/corticobulbar tracts, and transverse pontocerebellar tracts. The leptomeninges are thickened, with chronic inflammatory cells composed of macrophages and plasma cells.

Microscopic examination of the cerebellum shows mild to moderate acute hypoxic-ischemic changes involving the Purkinje cells and the dentate nucleus.

Sections of dura mater show no abnormality. The anterior pituitary gland demonstrates normal cytoarchitecture. The posterior pituitary gland is composed of normal appearing neuropil.

*Unless otherwise indicated sections are stained only with hematoxylin and eosin (H&E).

Cassette Code	Tissue Location	Stain
B1	Frontal lobe	
B2	Basal ganglia, left	
B3	Thalamus	
B4	Hippocampus	
B5	Occipital lobe	
B6	Pons	
B7	Cerebellum	
B8	Dura, pituitary	

Report Tracking

Reported by:

Verified by: Kurt Nolte MD on 8/21/2018 10:49:16 AM

Reviewed and approved by: Kurt Nolte MD on 4/8/2019 2:35:41 PM

Medical Investigator

Kurt Nolte MD

Medical Investigator Trainee

Microscopic description:

Heart: No pathologic abnormality.

Lungs: Extensive intra-alveolar mononuclear cells, neutrophils, erythrocytes and fibrin with focal hyaline membranes and interstitial expansion. PAS, GMS and AFB stains show no organisms.

Kidney: No pathologic abnormality.

Liver: Autolysis. Moderate microvesicular fatty change in hepatocytes. Paucity of lymphocytes in portal triads.

Adrenals: Autolysis. No pathologic abnormality.

Pancreas: Autolysis. No pathologic abnormality.

Esophagus: Focal non-specific submucosal chronic inflammation. No ulcer appreciated. A PAS stained section shows Candidal-type organisms without associated inflammation on a desquamated mucosal fragment likely representing colonization. A GMS stained section is negative for organisms.

Stomach: Autolysis. No pathologic abnormality.

Small intestine: Autolysis. A section of duodenum has no pathologic abnormality. A section of jejunum has dilated submucosal lymphoid channels.

Colon: Sections of colon including rectum show autolysis with no pathologic abnormality.

Spleen: Autolysis.

Lymph nodes: Autolysis. See Hematopathology Consultation report for description of well preserved histology on antemortem lymph node biopsy.

*Unless otherwise indicated sections are stained only with hematoxylin and eosin (H&E).

Block	Tissue Location	Description	Stain
A1	Heart		
A2	Right lung		
A3	Liver, kidney		
A4	Adrenals		
A5	Rectum		
A6	Spleen, pancreas		
A7	Esophagus		
A8	Stomach		
A9	Duodenum		
A10	Left lung		
A11	Hilar and paratracheal lymph nodes		
A12	Esophageal ulcer		
A13	jejunum and jejunal mucosal nodule		
A14	Colon		

Report Tracking

Reported by:

Verified by: Kurt Nolte MD on 3/27/2019 5:48:08 PM

Reviewed and approved by: Kurt Nolte MD on 4/8/2019 2:35:41 PM

Medical Investigator

Kurt Nolte MD

Date of examination: 6/7/2018 12:58:00 PM

Study date: 5/26/2018 9:37:00 AM

Accession number:

Exam type:

Technique:

Comparison:

Comments:

Lungs:
Diffuse opacification of both lungs.
Left lung calcified granuloma.
Small bilateral pleural effusions.
Multiple nonspecific enlarged mediastinal lymph nodes.
Calcified left hilar lymph nodes.

Heart, Pericardium and Thoracic Aorta:
Small pericardial effusion.

Liver and Gallbladder:
Negative

Pancreas:
Negative

Spleen:
Negative

Kidneys:
Right nephrolith

Adrenal Glands:
Calcification of left adrenal from prior infection or hematoma

Gastrointestinal Tract:
Fluid filled but nondilated loops of bowel.
Moderate abdominal ascites.
Multiple mesenteric lymph nodes.

Urinary Bladder:
Negative

Genitalia:
Negative.
Subcutaneous scrotal edema

Brain and meninges:
Negative

Skull:
No fracture
Diffuse subcutaneous edema. Small subcutaneous scalp hematoma over left occipital region.

Cervical Vertebrae:

Negative
Extensive cervical lymphadenopathy.

Thoracic and Lumbar Vertebrae:
Negative

Thoracic wall:
Rib fractures: Anterior left 3-6 rib fractures and anterior right 2-4 rib fractures likely from resuscitation.
Sternal fracture: Nondisplaced transverse sternal fracture likely from resuscitation.

Pelvis:
Negative
Multiple enlarged inguinal lymph nodes.

Extremity fracture:
No acute or subacute extremity fractures. Diffuse subcutaneous edema.

Body surface injury:
Diffuse subcutaneous edema. Extensive edema precludes evaluation for soft tissue injury.
Axillary lymphadenopathy, some calcified on the right.

IMPRESSION:
- Left scalp hematoma. No other evidence of soft tissue injury although diffuse soft tissue edema/anasarca could obscure soft tissue findings of injury.
- Extensive lymphadenopathy may be related to HIV or HIV related infection, lymphoma, or other etiology.
- Anasarca.
- Diffuse opacification of lungs may relate to diffuse pulmonary edema, ARDS, or pneumonia.

Interpreting radiologist:
Gary Mlady MD, Chair, UNM Dept of Radiology
Above report sent via email on 12/10/18

Report Tracking	
Reported by:	
Verified by:	Kurt Nolte MD on 3/11/2019 4:01:02 PM
Reviewed and approved by:	Kurt Nolte MD on 4/8/2019 2:35:41 PM

Medical Investigator	Medical Investigator Trainee
Kurt Nolte MD	

Date of examination: 6/7/2018 12:58:00 PM

Other comments:

Internal visceral examination conducted on 6-7-18

Report Tracking	
Reported by:	
Verified by:	Kurt Nolte MD on 6/7/2018 1:09:25 PM
Reviewed and approved by:	Kurt Nolte MD on 4/8/2019 2:35:41 PM

Case Number: 2018-03102
Decedent Name: HERNANDEZ RODRIGUEZ, ROY ALEXANDER
Pathologist: Kurt Nolte MD
Fellow/Resident:
Date of Examination: 6/7/2018 12:58:00 PM

Morphology technican(s) present

Yellow Sheet	Morphology Technician
Identification	Micaela Aragon-Greer
Evidence	Micaela Aragon-Greer
Radiology	Micaela Aragon-Greer
Retention	Micaela Aragon-Greer
LabOther	Micaela Aragon-Greer
Autopsy	Micaela Aragon-Greer
Evidence	Micaela Aragon-Greer
Attendees	Micaela Aragon-Greer

Morphology technican supervisor(s) present

Yellow Sheet	Morphology Technician Lead
Identification	Jordan Sousa
Autopsy	Cassandra Toledo
Evidence	Jordan Sousa
Radiology	Jordan Sousa
Retention	Jordan Sousa
LabOther	Sheena Curtis
Attendees	Jordan Sousa

Autopsy attendees

Other morphology technicians present:

Daria Koehlert- Staff Tech
Jordan Sousa- Sr Tech

Specimens obtained for laboratory testing

HIV serology:	No
HIV spin and store:	Yes
HCV/HBV serology :	No
Influenza serology:	No
Other serology:	No
Freezer protocol:	No
DNA card:	Yes
Metabolic screen:	No
Cytogenetics:	No
Med-X protocol:	No
Urine dipstick:	No
Blood cultures (bacterial):	No
Lung cultures (bacterial):	No
CSF culture (bacterial):	No
Spleen culture (bacterial):	No
Stool culture (bacterial):	No
Other bacterial culture (specify):	
Mycobacterial culture (lung):	No
Mycobacterial culture (other):	No
Viral Cultures:	No

Approach to autopsy dissection

Rokitansky evisceration:	No
Virchow evisceration:	Yes
Modified evisceration:	No

Special autopsy techniques

HIV serology:	No
Pericranial membrane removal:	No
Neck anterior dissection:	No
Neck posterior dissection:	No
Facial dissection:	No
Vertebral artery dissection (in situ):	No
Cervical spine removal:	No
Layered anterior trunk dissection:	No
Anterolateral rib arc dissection:	No
Back dissection:	No
Posterior rib arc dissection:	No
Extremity soft tissue dissection:	No
Eye enucleation:	No
Inner middle ear evaluation:	No
Maxilla or mandible resection:	No
Spinal cord removal (anterior):	No
Spinal cord removal (posterior):	No
Other dissection(s):	

Tissues retention

Stock jar with standard tissue retention:	No
Rib segment:	No
Pituitary gland:	No
Breast tissue (women only):	No
Brain retention:	No
Spinal cord retention:	No
Cervical spine retention:	No
Heart retention:	No
Heart-lung block retention:	No
Rib cage retention:	No
Long bone retention:	No
Other retention,specify:	

Disposition of tissues retained for extended examination

Specimen outcome: Not applicable; no tissues were retained for extended examination.

Number of scene photos produced by the OMI

Scene Photos: 0

Number of autopsy photos produced by the OMI

Autopsy Photos: 58

Evidence collected

FBI blood tube: No
Blood spot card: No
APD blood card: No
Thumbprint: Yes
Fingerprints: No
Palmprints: No
Print hold: Yes
Oral swab: No
Vaginal swab: No
Anal swab: No
Other swab: No
Fingernails: No
Scalp hair: No
Pubic hair: No
Pubic hair combing: No
Projectile(s): No
Retain clothing: No
Retain valuables: No
Retain trace evidence: No
Retain body bag: No
Retain hand bags: No
Ligature: No
Other evidence retained:

Personal effects

Property Type	Property Description	Property Detail
Valuables	Hair tie	n/a
None	Other	No Clothing Items to Inventory
Fingerprints	Describe	one set

Clothing

Property Type	Property Description	Property Detail