SCHOOL OF MEDICINE
OFFICE OF THE MEDICAL INVESTIGATOR

Report of Findings

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

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

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.