

POSTMORTEM EXAMINATION

Tesillo-Gabaldon, Keeley
OMI Case Number: 2023-05142

Year of Birth: 2023

Age: [REDACTED]

Date/Time of Death Pronouncement: 7/16/2023 12:43:00 PM

County Pronounced: Bernalillo

Law Enforcement: Albuquerque Police Department

Agent: Chris Niederhauser

Central Office Deputy Medical Investigator (FDMI): Joseph Kolb

Type of Examination: Autopsy

Date of Examination: 7/17/2023

CAUSE OF DEATH:

Toxic effects of methamphetamine

MANNER OF DEATH:

Undetermined



Kristan Abernathy M.D.

11/30/2023 06:34:04 PM



Daniel Gallego M.D.

11/30/2023 06:34:04 PM

FINAL PATHOLOGIC DIAGNOSIS:

I. Toxic effects of methamphetamine

A. Postmortem toxicology testing performed on blood

- i. Methamphetamine 13 ng/mL and amphetamine 8.9 ng/mL

B. Drug paraphernalia found at the scene

II. Anatomically normal [REDACTED] female infant

A. [REDACTED]

- i. [REDACTED]

B. Weight 6.2 Kg (5th percentile for age)

C. Height 63 cm (8th percentile for age)

D. Neuropathology examination

- i. See separate neuropathology report

E. Centers for Disease Control and Prevention Consultation

- i. See separate CDC pathology report

III. Unsafe sleep environment

A. Decedent unresponsive in an adult bed with bedding and multiple surrounding objects

- i. Per conflicting and limited reports, found lying on her back next to twin sister with no pillows or blankets covering the airways

B. Anterior and posterior livor mortis

NARRATIVE SUMMARY AND OPINION:

This [REDACTED] female, Keeley Tesillo-Gabaldon, died of the toxic effects of methamphetamine. The manner of death is undetermined.

According to investigative reports, on 07/16 Keeley was found unresponsive lying on an adult bed in a motel room next to her twin sister.

[REDACTED] Extensive drug paraphernalia was found in the motel room. [REDACTED]

There are conflicting stories regarding the circumstances surrounding death and there is still no clarity in relation to some of the details. Overall, it appears that the father of the decedent was doing drugs and passed out and when he waked up, he found Keeley unresponsive. Per reports, video recording (not examined by the OMI) showed the father running, screaming, and looking for the mother of the decedent in the main lobby, who then entered the room and found Keeley unresponsive. The father fled the scene.

It is currently unclear if Keeley was sleeping before the father passed out, the exact position in which Keeley was found

unresponsive, and if the father moved Keeley before looking for the mother.

[REDACTED]

An autopsy and postmortem imaging (computed tomography scan of the full body and skeletal X-ray survey) revealed a well-developed female infant with no external or internal injuries identified. Anterior and posterior livor were present. There was no diagnostic underlying natural disease on gross and microscopic examination of the organs.

Examination of the brain was performed by a neuropathologist. Refer to the separate report for details.

Selected slides and tissue blocks of this case (heart, lungs, liver, kidneys, adrenals, and brain) were submitted for examination to the Centers for Disease Control and Prevention to look for underlying infectious etiologies. Molecular studies were performed looking for multiple organisms which were negative. Refer to the separate CDC report for details.

Postmortem toxicology testing revealed the presence of methamphetamine, and its breakdown product, amphetamine. Refer to the separate NMS laboratories report for details.

A postmortem metabolic screen was negative.

Postmortem viral testing was negative for influenza, COVID-19, and virus isolation.

Bacterial cultures of fluid surrounding the spinal cord were negative. Cultures of the right lung, left lung, and heart grew multiple organisms that in the absence of significant inflammation under the microscope are favored to represent postmortem overgrowth/bacterial contamination.

Methamphetamine is a stimulant drug that can have toxic effects a wide range of concentrations. It can cause increased heart rate and blood pressure which can lead to circulatory collapse, fatal irregular heartbeats, and death.

Given the characteristics of the livor, the adult bed containing bedding and multiple objects, and the history of prematurity it is possible that an unsafe sleep environment may have been a contributory factor to death; however, interpretation is limited due to the lack of clarity and reliance on the details surrounding the positioning of Keeley's body and overall the conflicting reports of the circumstances surrounding death.

Currently, it is unclear how and why methamphetamine was found on Keeley's body, and therefore, the manner of death is best certified as undetermined.

If more information becomes available, the cause and manner may be revisited.

EXTERNAL EXAMINATION

GENERAL

An autopsy is performed on the body identified as Keeley Tesillo-Gabaldon at the Office of the Medical Investigator, State of New Mexico, on 07/17/2023, beginning at 0945. The body is that of a well-developed, well-nourished infant Female, without dysmorphic features of stated age of [REDACTED], who weighs 6.235 kg (at the 5th percentile for age), has a crown-heel length of 63 cm (at the 8th percentile for age), a head circumference of 41 cm (at the 14th percentile for age), a chest circumference of 37.5 cm, an abdominal circumference of 37.0 cm, and foot length of 9.0 cm. An identification band is around the right ankle bearing the decedent's name. The body is received clad. Personal effects are listed in the "Personal Effects" inventory.

POSTMORTEM CHANGES

The body is cold subsequent to refrigeration. Rigor mortis is absent. Fixed, purple livor mortis extends over the anterior and posterior surfaces of the body, except in areas exposed to pressure. The body is without significant decomposition changes.

EXAMINATION

Head and Neck:

The head is normally formed. Scalp hair is black, and short. The hair growth pattern is normal. The anterior fontanelle is patent; the posterior fontanelle is closed. The eyes are normally formed; the irides are brown. The corneas are translucent. The sclerae are white and conjunctivae are clear. No petechial hemorrhages are identified on the sclerae, bulbar conjunctivae, facial skin or oral mucosa. The ears are normally formed and placed, with the appropriate amount of cartilage. The nose and lips are unremarkable. The oral frenula are intact. The choanae are probe patent. The palate is intact and normally arched. The mouth is edentulous, in keeping with appropriate development for age. The neck is symmetrical, without abnormality.

Torso:

The thorax is is well-developed and symmetrical. The abdomen is flat. The spine is normally formed. Female genitalia demonstrate infant development and are unremarkable. The anus is free of lesions.

Extremities:

The upper extremities are normally formed and symmetrical, without absence of digits. The right foot is inverted and without absence of digits. The left lower extremity is normally formed and without absence of digits. Palmar creases are unremarkable.

MARKS, SCARS, and COSMETIC PIERCINGS

There are no readily apparent scars.

There are no readily apparent cosmetic piercings.

TATTOOS

No tattoos are observed.

[REDACTED]

[REDACTED]

EVIDENCE OF INJURIES

There are no observable injuries.

INTERNAL EXAMINATION

GENERAL

There are no internal injuries.

BODY CAVITIES

No adhesions or abnormal collections of fluid are present in the pleural and peritoneal cavities. All body organs are present in normal and anatomic position, unless otherwise noted. There are petechiae on the serosal surface of the thymus. All of the remaining serous surfaces are smooth, glistening and free of petechiae. The intact diaphragm separates the thoracic and peritoneal cavities. Expected visceral weights for Female, liveborn infants of [REDACTED] are cited in brackets following measured weights.

CENTRAL NERVOUS SYSTEM

The brain weighs 760 grams [expected = 730 grams]. The dura mater and falx cerebri are intact, and the leptomeninges are thin and translucent. The cerebrospinal fluid is clear. The external examination of the brain reveals a gyral pattern appropriate for age. The structures at the base of the brain, including cranial nerves and blood vessels, are intact. The brain is preserved in formalin for further examination. Please see separate forensic neuropathology report.

NECK

Examination of the soft tissues of the neck, including strap muscles and large vessels, reveals no abnormalities. The hyoid bone and larynx are intact. The epiglottis is firm, non-swollen and non-erythematous. The tonsils and adenoids are appropriate for age. The tongue is normal.

CARDIOVASCULAR SYSTEM

The heart weighs 28.23 grams [expected = 37 grams]; the shape and size of the heart are not unusual with appropriate lateralization features. The pericardial surfaces are smooth, glistening and unremarkable. The pericardial sac is free of significant fluid or adhesions.

The coronary arteries arise normally and follow the distribution of a right dominant pattern. The coronary arteries are widely patent. There are no coronary arterial thrombi, plaque hemorrhages or dissections. The coronary ostia are patent and appropriately placed.

The following circumferential valve measurements are obtained: tricuspid valve- 4.8 cm; pulmonic valve- 2.0 cm; mitral valve- 3.5 cm; aortic valve- 2.5 cm.

The myocardium is homogeneously dark red-brown, firm and unremarkable; the atrial and ventricular septa are intact. The myocardial thicknesses are measured as follows: left ventricle- 0.7 cm, right ventricle- 0.2 cm, and interventricular septum 0.6 cm. The endocardium is free of fibrosis. The foramen ovale is closed.

The pulmonary artery, the aorta and their major branches arise normally and follow the usual course without thrombotic obstruction or coarctation. The ductus arteriosus is closed. The vena cava, its major tributaries and the pulmonary veins are patent and return to the heart in the usual distribution.

INTERNAL EXAMINATION

PULMONARY SYSTEM

The right and left lungs weigh 70.39 grams and 55.36 grams [expected = 111 grams, combined], with the normal distribution of lobes and fissures. The upper and lower airways are patent, and the mucosal surfaces are smooth and yellow-tan without erythema. The pleural surfaces are smooth and glistening. The pulmonary parenchyma is dark red-purple, and the cut surfaces exude slight amounts of blood and frothy fluid. The pulmonary arteries are normally developed and patent.

HEPATOBIILIARY SYSTEM

The liver weighs 225.01 grams [expected = 242 grams] and has a normal configuration. The hepatic capsule is smooth, glistening and intact, covering red-brown parenchyma without fatty change. The central hepatic vasculature is free of thrombus. The gallbladder is normal and the cystic duct is patent. On cut section, the biliary system is not prominent or cystic. The extrahepatic biliary tree is patent.

GASTROINTESTINAL SYSTEM

The esophagus courses to the stomach without fistulae and is lined by gray-white mucosa without lesions. The gastric mucosa is unremarkable with the usual rugal folds and the lumen contains 5 ml of watery fluid. The pylorus is widely patent without muscular hypertrophy. The mesentery, small and large bowels have the usual size and position relationship. The appendix is in the right lower quadrant of the abdomen. The small and large bowels are of appropriate caliber without interruption of the luminal continuity. The serosa is smooth and glistening. The pancreas has normal, tan lobulated parenchyma.

GENITOURINARY SYSTEM

The right and left kidneys and capsules weigh 20.32 and 22.28 grams [expected = 58 grams, combined]. The cortical surfaces are smooth and red-brown. The cortices are well-delineated from the medullary pyramids. The calyces, pelves and ureters are free of dilatation. The urinary bladder contains no urine; the mucosa is tan and smooth.

REPRODUCTIVE SYSTEM

The uterus, cervix, fallopian tubes, ovaries and vagina are unremarkable.

RETICULOENDOTHELIAL SYSTEM

The spleen weighs 22.41 grams [expected = 18 grams] and has a smooth, intact capsule covering red-purple, soft parenchyma. The splenic white pulp is indiscernible. The regional lymph nodes are unremarkable. The mesenteric lymph nodes are prominent, but not unusual for age. The bone marrow (rib) is red, homogeneous and ample. The 24.72 gram thymus [expected = 10 grams] is tan-pink, lobulated and symmetrical with petechiae.

ENDOCRINE SYSTEM

The adrenal glands have normal cut surfaces with yellow cortex and gray medulla with the expected corticomedullary ratio. The thyroid gland has appropriate size, position, and consistency. The pituitary gland is unremarkable.

MUSCULOSKELETAL SYSTEM

The axial and appendicular skeletons are unremarkable. The musculature is well developed and symmetrical.

OTHER EXAMINATIONS

Additional examinations are not performed as part of routine, complete autopsy procedures.

ADDITIONAL STUDIES

Computed Tomography

Review of the postmortem computed tomography scan reveals no radiological evidence of injuries/trauma or significant underlying natural disease.

Radiography

Review of plain film radiographs (skeletal survey) reveals no radiological evidence of skeletal injuries/trauma.

Magnetic Resonance Imaging

Postmortem magnetic resonance imaging is not performed.

ADDITIONAL STUDIES

Microscopy

Review of microscopy reveals the following:

Cassette description:

A1: Left ventricle, left lung

A2: Right ventricle, right lung

A3: Trachea, thymus

A4: Liver, gallbladder

A5: Pancreas, spleen

A6: Right fallopian tube and ovary, left fallopian tube and ovary

A7: Large intestine, small intestine

A8: Stomach, esophagus

A9: Right kidney, right adrenal gland

A10: Left kidney, left adrenal gland

HEART: Sections of the left ventricle and right ventricle show no significant histopathologic abnormality.

LUNGS: Sections of the lungs show vascular congestion.

KIDNEYS: Sections of the kidneys show no significant histopathologic abnormality.

ADRENAL GLANDS: Sections of the adrenal glands show no significant histopathologic abnormality.

LIVER: A section of the liver shows no significant histopathologic abnormality.

GASTROINTESTINAL TRACT: Sections of the stomach, esophagus, small intestine, and large intestine show signs of autolysis.

REPRODUCTIVE TRACT: Sections of the right and left fallopian tubes show no significant histopathologic abnormality. Sections of the right and left ovaries show no significant histopathologic abnormality.

SPLEEN: A section of the spleen shows no significant histopathologic abnormality.

PANCREAS: A section of the pancreas shows no significant histopathologic abnormality.

THYMUS: A section of the thymus shows no significant histopathologic abnormality.

TRACHEA: A section of the trachea shows no significant histopathologic abnormality.

Refer to the separate neuropathology report and CDC pathology report for additional microscopic findings.

ADDITIONAL STUDIES

Ancillary Studies

Ancillary studies are performed as described below.

TOXICOLOGY

Postmortem toxicology was performed and the results are reported separately.

VIRAL TESTING

Viral testing of the nasopharynx and lungs did not detect COVID-19 or influenzae. Virus isolation was negative.

BACTERIAL CULTURES

Bacterial culture, heart blood

- *Aeromonas hydrophila*
- *Streptococcus agalactiae*
- *Leclercia adecarboxylata*

BACTERIAL CULTURE, RIGHT LUNG

- *Streptococcus agalactiae*, few

BACTERIAL CULTURE, LEFT LUNG

- *Streptococcus agalactiae*, many
- *Streptococcus mitis* group, few

- *Lactococcus lactis*, many
- *Escherichia coli*, rare

BACTERIAL CULTURE, CEREBROSPINAL FLUID

- No growth

METABOLIC SCREEN

Postmortem bile and blood spot metabolic screening was negative for an underlying metabolic disorder.