OFFICE OF THE MEDICAL INVESTIGATOR

Office of the Medical Investigator
MSC07 4040, 1 University of New Mexico
Albuquerque, New Mexico, 87131
P. 800.432.5239 | 505.272.3053 | F. 505.925.0532

POSTMORTEM EXAMINATION

Melton , Jeronimo

OMI Case Number: 2023-03124

Year of Birth: 2023

Age: 0 years

Date/Time of Death Pronouncement: 4/30/2023 8:15:00 PM

County Pronounced: Otero

Law Enforcement: Otero County Sheriff's Office

Agent: Sam Montoya

Central Office Deputy Medical Investigator (FDMI): Justin Dean

Type of Examination: Autopsy

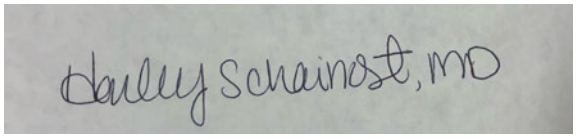
Date of Examination: 5/2/2023

CAUSE OF DEATH:

Starvation and dehydration

MANNER OF DEATH:

Homicide



Harley D Schainost M.D.

06/15/2023 12:47:41 PM

Audra Kerwin MD

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FINAL PATHOLOGIC DIAGNOSIS:

1. Starvation and dehydration
    i. Emaciation
        a. 1.25 kg body weight
            1. Less than 1st percentile for weight
    ii. Dehydration
        a. Poor skin turgor
        b. Sunken eyes
        c. Depressed anterior fontanelle
2. Anatomically normal infant male without injury
3. Patent foramen ovale

NARRATIVE SUMMARY AND OPINION:

This [redacted] boy, Jeronimo Melton, died of starvation and dehydration. The manner of death is homicide.

[redacted]. At approximately 2 weeks of age, his mother noted that he did not appear to be gaining weight. He received no medical care after birth. On the day of his death, Jeronimo was reportedly not eating and was not like his usual self, his parents called for Emergency Medical Services when he became unresponsive. [redacted]

Autopsy and postmortem computed tomography showed a very thin, dehydrated, anatomically normal infant boy. There is a patent foramen ovale, which is a connection in the heart in utero that normally closes after birth, however this finding is relatively common and would not be expected to cause symptoms in an infant.

A photo provided by law enforcement of Jeronimo on the day of his birth showed adequate subcutaneous fat, and he did not appear significantly premature. Subsequent photos as he aged show progressive emaciation.

An exact gestational age for Jeronimo at birth is not known, however, his mother estimates that he was born approximately 5 weeks early, [redacted] Multiple estimations of age were performed with the following results as estimated age at the time of his death: weight and height between 30-35 weeks gestational age; organ weights between 30-34 weeks gestational age; bone measurements between 32-35 weeks gestational age; and ossification centers between 35-37 weeks gestational age. Overall our estimated age based on all of the previous information is between 38-40 weeks gestational age at the time of his death. This indicates that his body weight, organ weights, and bone measurements are all measuring several weeks smaller than his actual age. An anthropologic analysis was also performed by a forensic anthropologist, which also concluded that there is disagreement between the skeletal development age estimation and long bone growth, which is suggestive of developmental stress. Please see the separate Anthropology report for further details.

Postmortem bacterial cultures showed no growth in the lungs, and contaminants only in the blood.

Postmortem viral cultures of the lungs and nasopharynx were negative for viruses, including influenza and COVID-19.

A postmortem metabolic screen was negative.

A postmortem karyotype showed normal male chromosomes.

Postmortem toxicology testing was negative for common drugs of abuse and alcohol.

A neuropathology examination showed a normal brain for age. Please refer to the separate neuropathology report for further details.

Jeronimo died from starvation and dehydration. At autopsy he was emaciated and showed significant signs of dehydration. An infant is entirely reliant on their caregivers to provide them with adequate nutrition and medical care. Without adequate food and fluid, the organs of the body do not have the fuel they need to function, eventually leading to organ failure and

death. Despite Jeronimo's significant weight loss from birth, and poor feeding the day of his death, no medical attention was sought for him [redacted]. Therefore, the manner is best classified as homicide.

EXTERNAL EXAMINATION

GENERAL

An autopsy is performed on the body identified as Jeronimo Melton, at the Office of the Medical Investigator, State of New Mexico, on May 2, 2023. The body is that of an infant male who has a weight of 1.25 kg (approximately less than 1st percentile), has a crown-heel length of 42 cm (approximately less than 1st percentile), and a head circumference of 27.5 cm (approximately less than 1st percentile), with the reported age [redacted] Encircling the right wrist is an identification band bearing the decedent's name. The body is received unclad. Personal effects are listed in the "Personal Effects" inventory.

POSTMORTEM CHANGES

The body is cool subsequent to refrigeration. Rigor is absent. Livor mortis is fixed, purple, and distributed on the anterior and posterior surfaces of the body, except in areas exposed to pressure.

EXAMINATION

The head is normally formed. The scalp hair is brown and short. The anterior fontanelle is depressed. The irides are blue. The corneas are clear. The sclerae and conjunctivae are white and clear. No petechial hemorrhages are identified on the sclerae, conjunctivae, facial skin, or oral mucosa. The eyes are sunken. The nose and ears are normally formed. The mouth is edentulous. The neck is unremarkable.

The thorax is well-developed and symmetrical. The abdomen is flat. The spine is normally formed. The anus is unremarkable.

The upper and lower extremities are well-developed and symmetrical without absence of digits. Palmar creases are unremarkable. There is poor skin turgor.

The external genitalia are that of an infant male without abnormalities.

MARKS, SCARS, AND COSMETIC PIERCINGS

There are no readily apparent significant scars. There are no piercings.

TATTOOS

There are no readily apparent tattoos.

[redacted]

EVIDENCE OF INJURIES

There is no evidence of significant recent antemortem injury.

INTERNAL EXAMINATION

GENERAL

There are no internal injuries or evidence of decomposition.

BODY CAVITIES

No adhesions or abnormal collections of fluid are present in any of the body cavities. All body organs are present in the normal anatomical positions.

CENTRAL NERVOUS SYSTEM

Please refer to the separate Neuropathology report for details regarding the central nervous system.

NECK

Examination of the soft tissues of the neck, including the strap muscles and large vessels, reveals no abnormalities. The hyoid bone and larynx are intact. The tongue is normal.

CARDIOVASCULAR SYSTEM

The heart weighs 8.5 grams and is conical. The pericardial sac is free of significant fluid or adhesions. The pericardial surfaces are smooth and glistening.

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

The heart valves are unremarkable.

The myocardium is dark red-brown, firm, and free of focal or regional fibrosis, erythema, pallor, or softening. The atrial and ventricular septa are intact, and the septum and free walls are free of muscular bulges. The foramen ovale is open. The chambers are not dilated.

The left ventricle is 0.3 cm in thickness, and the right ventricle is 0.2 cm in thickness, as measured 1 cm below the respective atrioventricular valve annulus. The interventricular septum is 0.3 cm in thickness.

The aorta and its major branches arise normally and follow the usual course without atherosclerosis. The ductus arteriosus is anatomically and functionally closed. The orifices of the major aortic vascular branches are patent. The vena cava with its major tributaries are patent, return to the heart in the usual distribution, and are unremarkable.

RESPIRATORY SYSTEM

The right and left lungs weigh 20.3 and 16.6 grams, respectively. The upper and lower airways are unobstructed with smooth, yellow-tan mucosal surfaces. The pleural surfaces are smooth, glistening, and unremarkable. The pulmonary parenchyma is dark red-purple, and the cut surfaces exude minimal amounts of blood and frothy fluid. The pulmonary arteries are normally developed without atheromas. There is no saddle embolus on in situ examination of the pulmonary trunk.

HEPATOBILIARY SYSTEM

The liver weighs 50 grams. The hepatic capsule is smooth, glistening and intact covering moderately firm, red-brown parenchyma. No mass lesions are noted. The gallbladder contains watery, green-brown bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent and without evidence of calculi.

GASTROINTESTINAL SYSTEM

The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is autolyzed, and the lumen contains minimal green mucous. The serosa of the small bowel is smooth and glistening. There are no lesions of the duodenal or colorectal mucosa. The colon contains liquid green stool. The appendix is unremarkable. The pancreas has a normal tan-purple, lobulated appearance.

GENITOURINARY SYSTEM

The right and left kidneys weigh 8.4 and 8.3 grams, respectively. The renal capsules are smooth, thin, and semitransparent and strip with ease from the underlying smooth, red-brown, firm cortical surfaces. The cortices are of normal thickness and well-delineated from the medullary pyramids. The calyces, pelvises, and ureters are non-dilated and free of stones. The urinary bladder contains no urine; the bladder mucosa is gray-tan and smooth.

REPRODUCTIVE SYSTEM

The prostate gland and seminal vesicles are infantile. The testicular parenchyma is unremarkable.

RETICULOENDOTHELIAL SYSTEM

The spleen weighs 5.4 grams and has a smooth, intact capsule covering red-purple, moderately firm parenchyma. The splenic white pulp is prominent. The bone marrow (rib) is red-purple. Mesenteric lymph nodes are prominent but not unusual for age. The thymus is unremarkable and weighs 2.5 grams.

ENDOCRINE SYSTEM

The pituitary gland is of normal size. The thyroid gland is of normal position, size, and texture. The adrenal glands have normal cut surfaces with yellow cortices and gray medulla. The right adrenal is 0.9 grams and the left adrenal is 1.1 grams.

MUSCULOSKELETAL SYSTEM

The bony framework, supporting musculature, and soft tissues are unremarkable. The cervical spinal column is stable on internal palpation.

ANCILLARY STUDIES

POSTMORTEM COMPUTED TOMOGRAPHY AND X-RAY

Review of the postmortem computed tomography scan and skeletal survey by the forensic pathologist and radiologist, reveal no evidence of traumatic injuries. Bilateral pulmonary opacities are present, consistent with cardiopulmonary resuscitation changes.

HISTOLOGY

A1: Spleen, right kidney, right adrenal
A2: Left kidney, left adrenal, thymus
A3: Stomach, esophagus, appendix
A4: Small bowel, colon
A5: Bladder, prostate, teste
A6: Left lung
A7: Right lung
A8: Heart
A9: Trachea, pancreas, gallbladder
A10: Liver, thyroid
A11-12: Ribs

HEART: A cross section of the ventricles of the heart shows no significant histopathologic abnormality.
TRACHEA: A section of the trachea shows no significant histopathologic abnormality.
LUNGS: Sections of the lungs show increased macrophages.
ESOPHAGUS: A section of the esophagus shows no significant histopathologic abnormality.
STOMACH: A section of the stomach shows no significant histopathologic abnormality.
SMALL INTESTINE: A section of the small intestine shows no significant histopathologic abnormality.
COLON: Sections of the colon show no significant histopathologic abnormality.
APPENDIX: A section of the appendix shows no significant histopathologic abnormality.
LIVER: A section of the liver shows 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.
GALLBLADDER: A section of the gallbladder shows no significant histopathologic abnormality.
ADRNEAL GLANDS: Sections of the adrenal glands show intraparenchymal hemorrhage.
THYROID: A section of the thyroid shows no significant histopathologic abnormality.
KIDNEYS: Sections of the kidneys show no significant histopathologic abnormality.
PROSTATE: A section of the prostate shows no significant histopathologic abnormality.
BLADDER: A section of the bladder shows no significant histopathologic abnormality.
THYMUS: A section of the thymus shows no significant histopathologic abnormality.

TESTIS: A section of the testis shows no significant histopathologic abnormality.
RIBS: Sections of the ribs show organized endochondral ossification, and trilineage hematopoiesis.

CULTURES

Bacterial:

Heart blood: Staphylococcus haemolyticus
Staphylococcus epidermidis
Lungs: No growth

Viral:

Nasopharyngeal swab, lungs: Virus isolation: No virus isolated
CDC Influenza SARS-CoV-2: Negative

METABOLIC SCREEN

No biochemical evidence indicative of an underlying metabolic disorder.

CYTOGENETICS

A karyotype showed a male chromosomal complement without abnormalities (46, XY).

TOXICOLOGY

Toxicology testing was performed and reported in full separately.