

DEATH INVESTIGATION SUMMARY

Case Number: 2015-04525

C DE BACA, BEN A.

County Pronounced: Sandoval
Law Enforcement: Rio Rancho Department of Public Safety
Agent: Detective Steve Gill
Date of Birth: [REDACTED] 1970
Pronounced Date/Time: 9/6/2015 11:23:00 PM
Central Office Investigator: Elizabeth Gonzales
Deputy Field Investigator: Tomlinson, Franklin

CAUSE OF DEATH

Excited delirium (cocaine intoxication) complicated by means of physical restraint

OTHER SIGNIFICANT CONTRIBUTORY CONDITIONS

Hypertensive and atherosclerotic cardiovascular disease

MANNER OF DEATH

Homicide

Lauren Dvorscak MD

Forensic Pathology Fellow

Ian Paul MD

Associate Medical Investigator

All signatures authenticated electronically

Date: 1/14/2016 10:29:33 AM

DECLARATION

The death of C DE BACA, BEN A. was investigated by the Office of the Medical Investigator under the statutory authority of the Office of the Medical Investigator.

I, Ian Paul MD, a board certified anatomic, and forensic pathologist 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 8 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. Microscopy
8. Postmortem Computed Tomography

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

Ian Paul MD

Medical Investigator Trainee

Lauren Dvorscak MD

SUMMARY AND OPINION

PATHOLOGIC DIAGNOSIS

- I. Excited delirium
 - A. Postmortem femoral blood cocaine level = 0.67 mg/L
 - B. History of perimortem agitation
- II. Atherosclerotic and hypertensive cardiovascular disease, severe
 - A. Mild cardiomegaly, 375 g
 1. Left ventricular wall thickness = 1.5 cm
 - B. At least 90% stenosis of the left anterior descending coronary artery
 - C. Up to 75% stenosis of the left main coronary artery
 - D. Up to 25% stenosis of the right main and left circumflex coronary arteries
 - E. Remote infarct, left ventricular free wall, at least 3.8 cm
 - F. Renal arteriolosclerosis, mild
- III. Blunt trauma, head, trunk, and extremities, minor
 - A. History of mechanical restraint
 1. Horizontal, linear furrows and abrasions, wrists
 - B. Abrasions and contusions, multiple
- IV. Lymphocytic hepatitis and bridging fibrosis
- V. Left nephrectomy, remote
- VI. Appendectomy, remote
- VII. Medical intervention
 - A. Contusion, central chest
 - B. Cartilagenous fracture, right fourth rib
 - C. Intercostal and periosteal hemorrhages, mild
 - D. Epicardial petechiae and apical cardiac contusion

This 45 year old man, Ben C De Baca, died of excited delirium (cocaine intoxication) complicated by means of physical restraint. Significant contributory factors include hypertensive and atherosclerotic cardiovascular disease.

According to reports, Mr. C De Baca had an argument with his girlfriend and sped off in her car, crashing into a parked vehicle nearby. He was seen exiting the vehicle and running across the street into a store. Witnesses say that he appeared agitated and began destroying shop merchandise. At that time, he was restrained by employees. When law enforcement officers arrived, he reportedly continued to be agitated and resisted physical restraint. He was moved by several officers to an area outside of the store and placed into a prone position on the ground. He reportedly continued to struggle, and bit an officer on the leg. He was handcuffed behind his back and his feet were shackled in an attempt to restrain him. After approximately 3-5 minutes, officers noted that he stopped struggling and became unresponsive. The restraints were immediately removed, emergency services were activated, and resuscitation attempts were unsuccessful.

Additional information provided by law enforcement indicates that a specialized shield was used to prevent Mr. C De Baca from spitting on or further biting the officers. The cotton band that typically secures the shield at the neck was observed to be covering the nose and mouth during the struggle.

Autopsy revealed minor scrapes and bruises on the head, torso, and extremities. Depressions and superficial scrapes on the wrists were consistent with marks made by handcuffs. Minor abrasions of the forehead and face were consistent with a face-down position during a struggle. Mild bruising of the heart, a displaced, anterior rib fracture, and mild bleeding into the chest wall could have occurred in the struggle. However, these injuries are commonly associated with resuscitation attempts and more likely occurred as a result of life-saving measures.

Mr. C De Baca also had evidence of severe heart disease on examination. The heart was heavy, with greatest enlargement of the left ventricle (pumping chamber). Significant atherosclerosis (hardening and narrowing) of the coronary arteries caused near total occlusion of the left anterior descending artery (a blood vessel at the front of the

heart). The coronary arteries are responsible for the supply of oxygen-rich blood to the heart muscle. When occluded significantly, the heart muscle starves and becomes ischemic (a heart attack occurs). Times of stress can increase the oxygen demand by the heart muscle and cause a further reduction in the amount of oxygen available for the heart to function. Mr. C De Baca had evidence of a prior heart attack, with extensive scarring of his heart muscle in the area supplied by the most occluded blood vessel.

Additional findings that did not necessarily contribute to death include [REDACTED]
[REDACTED] By microscopic examination, the liver showed significant inflammation and early scarring.

Toxicology analysis of the femoral blood revealed an elevated level of cocaine and its metabolite (break down product), benzoylecgonine. Cocaine is a very potent, illicit central nervous system stimulant which causes an increase in heart rate, blood pressure, and can place severe strain on the heart muscle by both increasing the demand for oxygen by the heart and limiting the supply of oxygen by spasm of the coronary arteries. In an intoxicated state, individuals may also develop excited delirium, which is a condition that manifests as severe disruptive behavior and agitation.

A complex, combination of factors ultimately led to Mr. C De Baca's death. Cocaine intoxication manifested as an excited delirium and disruptive behavior that brought him into contact with law enforcement. In efforts to control and restrain Mr. C De Baca, he was held by multiple means of physical restraint.

During and in a short period of time following stressful situations, such as struggling against physical restraints, stress hormones are released by the body. As part of the body's natural "fight or flight" response, these stress hormones act in a similar manner to stimulants, increasing the body's blood pressure and heart rate. As blood pressure and heart rate increase, the heart and body demand more oxygen to function properly. Without adequate oxygen supply to the heart, a heart attack or fatal arrhythmia (abnormal heart beats) may occur. A combination of the stressful situation, cocaine use, and his underlying heart disease, all would have greatly increased both his heart and body's demand for oxygen.

Additionally, Mr. C De Baca was placed prone with officers holding him down to restrain him, which can limit chest expansion and impair breathing. A spit shield was placed over his face, and was observed to cover his nose and mouth during the struggle. If improperly placed, spit shields also have the potential to impair breathing by suffocation.

Although Mr. C De Baca's delirium was ultimately cocaine induced, his struggle against physical restraint would have heightened the effects of his body's internal hormonal and chemical derangement. Also, the possibility of asphyxia (lack of oxygen) secondary to the use of a spit shield cannot be ruled out. Therefore, the manner of death is best classified as homicide.

Medical Investigator

Ian Paul MD

Medical Investigator Trainee

Lauren Dvorscak MD

External exam date time: 9/7/2015 8:57:00 AM
Authority for examination: OMI
ID confirmed at time of exam: Yes
Means used to confirm identity: Visual
Other verification means:
Location of orange bracelet: Right wrist
Name on orange bracelet: Decedent name
Other name on orange bracelet:
Location of green bracelet: Right wrist
Name on green bracelet: Decedent name
Other name on green bracelet:
Hospital ID tags or bracelets? No
If yes specify stated name and location:
Body length (cm): 183.00
Body weight (kgs): 80.40
BMI: 24.01

Development: Well-developed
Development comments:
Stature: Well-nourished
Age: Appears to be stated age
Anasarca: No
Edema localized: No
Dehydration: No
Scalp hair color: Gray
Scalp hair length: Short
Eyes: Both eyes present
Irides: Hazel
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:	Beard and moustache
Facial hair color:	Gray
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
Muscle group atrophy:	No
Senile purpura:	No
Pitting edema:	No
Muscle other:	No

Tattoo(s)

Tattoos present: No

Cosmetic Piercing(s)

Cosmetic piercing present: No

Scar(s)

Scar(s) present:	Yes
Scar scalp:	Yes
Scar abdomen:	Yes
Scar right hand:	Yes

Scar comment:

A vertical, linear, well healed, [REDACTED] scar is on the left abdomen.

External exam comment:

The decedent is clad in shorts and underwear only. The remainder of the clothing and a spit shield accompanies the body.

Reporting Tracking

Reported by:	Lauren Dvorscak MD
Verified by:	Ian Paul MD on 1/14/2016 10:23:44 AM
Reviewed and approved by:	Ian Paul MD on 1/14/2016 10:29:33 AM

Medical Investigator

Ian Paul MD

Medical Investigator Trainee

Lauren Dvorscak MD

Evidence of medical intervention: No

Medical intervention other:

[REDACTED]

Injuries consistent with resuscitation attempts include the following:

A 6 x 4 cm faint red contusion is on the central chest.

Mild, scattered periosteal and intercostal hemorrhages are associated with a cartilagenous fracture of the right anterior fourth rib.

A blue-purple, hemorrhagic contusion measuring up to 2.5 cm is on the anterolateral left ventricle, near the apex. Please see the internal examination section for a description of epicardial petechiae.

Report Tracking

Reported by:	Lauren Dvorscak MD
Verified by:	Ian Paul MD on 1/14/2016 10:23:12 AM
Reviewed and approved by:	Ian Paul MD on 1/14/2016 10:29:33 AM

Medical Investigator

Ian Paul MD

Medical Investigator Trainee

Lauren Dvorscak MD

External exam date: 9/7/2015 8:57:00 AM
Body temperature: Cool subsequent to refrigeration
Rigor mortis: Fully fixed
Livor mortis - color: Purple
Livor mortis - fixation (if applicable): Fully Fixed
Livor mortis - position (if applicable): Posterior
Livor mortis - blanching and patterns (if applicable):
Livor on the posterior shoulders and upper arms is associated with Tardieu spots.
State of preservation: Mild putrefactive decomposition
Drying of exposed mucous membranes: Yes

Report Tracking

Reported by: Lauren Dvorscak MD
Verified by: Ian Paul MD on 1/14/2016 10:23:23 AM
Reviewed and approved by: Ian Paul MD on 1/14/2016 10:29:33 AM

Medical Investigator

Ian Paul MD

Medical Investigator Trainee

Lauren Dvorscak MD

Are there any injuries: Yes

Evidence of Injury:

Autopsy date: 9/7/2015 8:57:00 AM

#	Injury	Location	Injury Description
1	Blunt injury	Head and neck	<p>A 4 x 2 cm, dark red-purple, irregular abrasion on the central forehead and frontal scalp at the hairline. On the left upper forehead is an additional, 1 x 0.5 cm, red-orange abrasion.</p> <p>A 0.5 x 0.5 cm brown abrasion is on the right parietal scalp. The right lateral forehead, at the hairline, has a 1 x 0.3 cm red abrasion. Above the left eyebrow is a 0.3 x 0.5 cm, oval, red-orange abrasion. At the medial left eyebrow is a 0.4 x 0.3 cm orange abrasion. Immediately inferior to the left eye is a horizontal, linear, red abrasion measuring 1 cm x 0.2 cm.</p> <p>A horizontal, 4 x 1 cm, red, superficial abrasion extends across the inferior chin.</p>
2	Blunt injury	Trunk	<p>A 4.5 x 2 cm, roughly rectangular, vertically oriented, purple contusion is on the upper left chest and shoulder, near the anterolateral neck.</p> <p>A 3 cm, linear, red abrasion is on the left chest, inferolateral to the left nipple.</p> <p>A 6 x 0.3 cm, horizontally oriented, linear red abrasion is on the upper back, between the inferior borders of the shoulder blades. A 1 x 0.2 cm red abrasion is on the central back.</p> <p>Bilateral intercostal and periosteal hemorrhages of the anterior chest are associated with a fracture of the anterior cartilage of the right fourth rib. Epicardial petechiae and a superficial, 1.5 cm left apical contusion are on the heart surface. Please see the evidence of medical intervention and internal examination sections for additional information.</p>

3	Blunt injury	Extremities	<p>Upper extremities</p> <p>Multiple, scattered, 3-5 cm red linear and irregular abrasions are on the right arm, antecubital fossa, and forearm. Red-purple contusions of the right shoulder measure up to 6 cm. The right elbow is discolored by a 4 x 3 cm, blue-green and yellow contusion. Adjacent to the contusion on the elbow is a 2.5 x 1 cm red-purple abrasion. Confluent blue-purple and red contusions are on the right posterior forearm, measuring up to 7 cm.</p> <p>Partially encircling the right wrist is a 6 x 0.3 cm linear red furrow with associated red abrasions. Adjacent blue-green contusions measure up to 3 x 1 cm on the lateral right wrist and hand. Three cm proximal to the furrow, on the lateral wrist, is 4 x 2 cm, irregular, superficial red abrasion with a deep, central, 2 x 0.8 cm, dark red-purple area. On the middle finger of the right hand are scattered abrasions near the fingernail measuring 0.2-0.5 cm and are associated with a partially blackened fingernail.</p> <p>A 3 cm, linear, blue-purple contusion is on the medial, left upper arm. The left anterior wrist has multiple horizontal, linear, red-purple furrows with associated superficial abrasions measuring up to 4 cm in length. A 1.5 cm, vertical, red-purple abrasion is on the left posterior hand, near the knuckle of the fourth digit.</p> <p>Lower extremities:</p> <p>Red abrasions ranging from 0.5-1 cm are on the right lateral shin, and knees. Few, faint red-purple contusions are also on the medial knees and right medial thigh, measuring up to 2 cm.</p>
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Report Tracking

Reported by: Lauren Dvorscak MD
Verified by: Ian Paul MD on 1/14/2016 10:24:39 AM
Reviewed and approved by: Ian Paul MD on 1/14/2016 10:29:33 AM

Medical Investigator

Ian Paul MD

Medical Investigator Trainee

Lauren Dvorscak MD

Date of Autopsy: 9/7/2015 8:57:00 AM

Date of Internal Exam: 9/7/2015 8:57:00 AM

BODY CAVITIES

Chest cavities examined:	Yes
Abdominal cavity examined:	Yes
See evidence of injury section	No
Organs in normal anatomic position	Yes
Other organ position comments	
The appendix and left kidney are surgically absent.	
Diaphragm:	Intact
Serosal surfaces:	Smooth and glistening
Body cavity adhesions present:	No
Fluid accumulation present:	No

HEAD

Brain examined:	Yes
See separate forensic neuropathology consultation report	No
See evidence of injury section:	No
See evidence of medical Intervention section:	No
See postmortem changes section:	No
Brain fresh (g):	1400
Brain fixed (g):	
Facial skeleton:	No palpable fractures
Calvarium:	No fractures
Skull base:	No fractures
Skull comments:	
Dura mater:	Unremarkable and without masses
Dural venous sinuses:	Patent
Leptomeninges:	Thin and transparent
Epidural hemorrhages / hematomas:	Absent
Subdural hemorrhages / hematomas:	Absent
Subarachnoid hemorrhages:	Absent
Cerebral hemispheres:	Symmetrical
Gyral and sulcal patterns:	Unremarkable
Gyral convolutions and sulci:	No widening or flattening of gyri and no narrowing of sulci

Uncal processes:	Unremarkable
Cerebellar tonsils:	Unremarkable
Cranial nerves:	Unremarkable
Basilar arterial vasculature:	Unremarkable
Cerebral cortex:	Unremarkable
White matter:	Unremarkable
Corpus callosum:	Unremarkable
Deep gray matter structures:	Unremarkable
Brainstem:	Unremarkable
Cerebellum:	Unremarkable

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:	Unremarkable
Palatine tonsils:	Not examined

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):	375.0
Heart fixed (g):	

Coronary artery stenosis by atherosclerosis (in percent):	
Right coronary ostium:	25
Proximal third right coronary artery:	25
Middle third right coronary artery:	10
Distal third right coronary artery:	10
Left coronary ostium:	10
Left main coronary artery:	75
Proximal third left anterior descending coronary artery:	90
Middle third left anterior descending coronary artery:	50
Distal third left anterior descending coronary artery:	25
Proximal third left circumflex coronary artery:	25
Middle third left circumflex coronary artery:	25
Distal third left circumflex coronary artery:	10

Cardiac Chambers and Valves:	
Cardiac chambers:	Other - See comments
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:	Other - See comments
Other myocardium comments:	
Extensive, white-tan fibrosis and scarring of the anterior and lateral left ventricle myocardium is in a left anterior descending artery distribution. The scarring measures up to 3.8 cm in greatest measurable extent and involves the near total thickness of the central anterior free wall. Scarring extends from the apex, halfway up to the base.	
Atrial septum:	Unremarkable
Ventricular septum:	Unremarkable
Right ventricular free wall thickness:	0.4 cm
Left ventricular free wall thickness:	1.5 cm
Interventricular septum thickness:	1.5 cm
Other heart comments:	
0.1-0.5 cm petechial hemorrhages are scattered on the epicardial surface, predominately on the anterior atria, anterior, and posterior left ventricle.	

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):	645
Lung left (g):	565
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:	Slight amounts of blood and frothy fluid
Pulmonary trunk:	Free of saddle embolus
Pulmonary artery thrombi:	None
Pulmonary artery atherosclerosis:	None

HEPATOBIILIARY SYSTEM

Liver examined:	Yes
See Evidence of Injury section:	No
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No
Liver (g):	1325
Bile vol (mL):	50
Gallstones autopsy:	No
Gallstones autopsy desc:	
Hepatic parenchyma (color):	Pale brown
Hepatic parenchyma (texture):	Other - See comments
Hepatic vasculature:	Unremarkable and free of thrombus
Gallbladder:	Unremarkable
Gallstones:	None
Intrahepatic biliary tree:	Unremarkable
Extrahepatic biliary tree:	Unremarkable
Other hepatobiliary comments:	

The liver has an overall smooth countour. On cut sections, the parenchyma is alternately soft and firm.

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): 200
 Stomach contents description:
 Green-brown liquid
 Appendix found: Yes

Esophagus

Course: Normal course without fistulae
 Mucosa: Gray-white, smooth and without lesions

Stomach

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

Small Intestine

Luminal contents: Partially digested food
 Mucosa: Unremarkable
 Caliber and continuity: Appropriate caliber without interruption of luminal continuity

Colon

Luminal contents: Formed stool
 Mucosa: Unremarkable
 Caliber and continuity: Appropriate caliber without interruption of luminal continuity
 Other colon comments:
 The appendix is surgically absent.

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: Slightly granular
 Cortices: Slightly thinned and well-delineated from the medullary pyramids
 Calyces, pelves and ureters: Non-dilated and free of stones and masses
 Other kidney comments:
 The left kidney is surgically absent.
 Kidney right (g): 160
 Kidney left (g): 0

Urine volume (mL): 365

Urine description:

Clear amber

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): 125

Spleen parenchyma: Moderately firm

Spleen capsule: Intact

Spleen white pulp: Prominent

Bone Marrow

Color: Red-brown, homogeneous and ample

Lymph Nodes

Regional adenopathy: No adenopathy

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: Other - See comments
Musculature: Unremarkable
Subcutaneous soft tissues: Unremarkable
Other musculoskeletal system comments: Multiple anterior rib fractures are identified. Please see evidence of medial intervention.

ADDITIONAL COMMENTS

Report Tracking

Reported by: Lauren Dvorscak MD
Verified by: Ian Paul MD on 1/14/2016 10:25:58 AM
Reviewed and approved by: Ian Paul MD on 1/14/2016 10:29:33 AM

Medical Investigator

Ian Paul MD

Medical Investigator Trainee

Lauren Dvorscak MD

Microscopic description:

HEART: remote, extensive scarring of the left ventricle myocardium, with occlusive atheroma formation in a coronary artery, myocyte hypertrophy

LUNG: minimal, patchy intra-alveolar fluid

LIVER: moderate periportal inflammation with early, incomplete bridging fibrosis

KIDNEY: few lamillated tubular and interstitial calcifications, patchy, mild arteriolar wall thickening and tubular atrophy, rare intra-tubular, non-polarizable cast

BRAIN: no significant histopathologic diagnosis

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

Block	Tissue Location	Description	Stain
A1		Left lung, left ventricle, kidney	
A2		Right lung, right and left ventricles	
A3		interventricular septum, liver	
A4		hippocampus, cerebellum with dentate	

Report Tracking

Reported by: Lauren Dvorscak MD
Verified by: Ian Paul MD on 1/14/2016 10:24:56 AM
Reviewed and approved by: Ian Paul MD on 1/14/2016 10:29:33 AM

Medical Investigator

Ian Paul MD

Date of examination: 9/7/2015 8:57:00 AM
Study date: 9/7/2015 12:00:00 AM
Accession number: 2015-04525
Exam type: Postmortem full body computed tomography
Technique: Standard
Comparison: None

Comments:

The postmortem CT scan is reviewed by the forensic pathologist and forensic pathology fellow.

Evidence of injuries include vague, costochondral irregularities of the bilateral anterior rib cartilages (best visualized on coronal torso reconstruction), without obvious displacement.

Evidence of medical intervention includes a laryngeal mask airway, defibrillator pads, and an left tibial intraosseus line.

Evidence of natural disease includes extensive calcification of the coronary arteries and patchy calcification of the aorta. The left kidney is absent.

Report Tracking	
Reported by:	Lauren Dvorscak MD
Verified by:	Ian Paul MD on 1/14/2016 10:22:56 AM
Reviewed and approved by:	Ian Paul MD on 1/14/2016 10:29:33 AM

Case Number: 2015-04525
 Decedent Name: C DE BACA, BEN
 Pathologist: Ian Paul MD
 Fellow/Resident: Lauren Dvorscak MD
 Date of Examination: 9/7/2015 8:57:00 AM

Morphology technican(s) present

Yellow Sheet	Morphology Technician
Identification	Daniel Gutierrez
Autopsy	Daniel Gutierrez
Evidence	Daniel Gutierrez
Evidence	Daniel Gutierrez
Radiology	Daniel Gutierrez
Retention	Daniel Gutierrez
Toxicology	Daniel Gutierrez
Toxicology	Daniel Gutierrez
Toxicology	Daniel Gutierrez
LabOther	Daniel Gutierrez
Attendees	Daniel Gutierrez

Morphology technican supervisor(s) present

Yellow Sheet	Morphology Technician Lead
Identification	Michael Jarvis
Autopsy	Brittany Vallejos
Evidence	Michael Jarvis
Radiology	Michael Jarvis
Retention	Michael Jarvis
Toxicology	Erika Cavalier
LabOther	Erika Cavalier
Attendees	Michael Jarvis

Autopsy attendees**Other morphology technicians present:**

Darla Bentzen - staff

Specimens obtained for toxicology testing

Use antemortem specimens for testing:	No
Femoral blood collected:	Yes
Heart blood collected:	Yes
Blood other collected:	No
Preserved vitreous collected:	Yes
Un-preserved vitreous collected:	Yes
Urine collected:	Yes
Bile collected:	No
Gastric contents collected:	No
Kidney tissue collected:	No
Liver tissue collected:	No
Brain tissue collected:	No
Muscle tissue collected:	No
Other tissue collected:	No

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:	Yes
Rib segment:	Yes
Pituitary gland:	Yes
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: 65

Number of autopsy photos produced by the OMI

Autopsy Photos: 63

Evidence collected

FBI blood tube: No
 Blood spot card: No
 APD blood card: Yes
 Thumbprint: Yes
 Fingerprints: No
 Palmprints: No
 Print hold: Yes
 Oral swab: No
 Vaginal swab: No
 Anal swab: No
 Other swab: No
 Fingernails: Yes
 Scalp hair: Yes
 Pubic hair: No
 Pubic hair combing: No
 Projectile(s): No
 Retain clothing: Yes
 Retain valuables: Yes
 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	Necklace	Brown string
Fingernail Clipping	Right Hand	w/clippers
Fingernail Clipping	Left Hand	w/clippers
Blood	FTA Blood Card	n/a
Hair	Scalp	n/a
Fingerprints	Describe	1 set of 10 print cards

Clothing

Property Type	Property Description	Property Detail
Clothing	Shirt	n/a
Clothing	Underpants	n/a
Clothing	Shorts	n/a
Clothing	Shoes	n/a
Clothing	Socks	n/a
Clothing	Other	spit shield