

DEATH INVESTIGATION SUMMARY

Case Number: 2016-04676

MARTENS, VICTORIA

County Pronounced: Bernalillo
Law Enforcement: APD; case 160078669
Agent: VC Josh Brown/crim. Nick Lasker
Date of Birth: 8/23/2006
Pronounced Date/Time: 8/24/2016 11:30:00 AM
Central Office Investigator: Philip Dees
Deputy Field Investigator: Philip Dees

CAUSE OF DEATH

Manual strangulation

MANNER OF DEATH

Homicide

Rebecca Asch-Kendrick, MD

Forensic Pathology Fellow

Matthew Cain, MD

Medical Investigator, Assistant Professor of
Pathology

All signatures authenticated electronically

Date: 11/22/2016 3:42:52 PM

DECLARATION

The death of MARTENS, VICTORIA was investigated by the Office of the Medical Investigator under the statutory authority of the Office of the Medical Investigator.

I, Matthew Cain, MD, a board certified anatomic, clinical, 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 9 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. Ancillary Lab Studies
9. 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

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

Last Date Saved:

Amendment:

Medical Investigator

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

SUMMARY AND OPINION**PATHOLOGIC ANATOMIC DIAGNOSES:**

- I. Evidence of manual strangulation
 - A. Multiple abrasions and contusions involving head and neck.
 - B. Intramuscular hemorrhages of anterior strap muscles, inferior pharyngeal constrictor, subcutaneous tissues of the posterior neck, and the right erector spinae muscle.
 - C. Petechial hemorrhages of palpebral conjunctivae, bilateral eyelids, bilateral periorbital region, and upper gingiva.
- II. Dismemberment and sharp force injury
 - A. Midline, incised wound with exposure of chest and abdominal cavity.
 - a. Portion of sternum, the heart, and the left lobe of the liver received separately.
 - b. Incised wounds of heart and liver.
 - c. Apparent tool marks on sternum.
 - B. Dismemberment of right and left upper extremities at the shoulder joints and attempted dismemberment of left leg at hip.
 - a. Spiral fracture of left humeral diaphysis.
 - b. Possible tool markings on left clavicle and scapula, both humeral heads, and left femur.
 - C. Multiple superficial incised wounds on torso.
- III. Evidence of prior sexual abuse
 - A. Viral cytopathic effect, rectum (microscopic).
- VI. Post-mortem charring of lower extremities
 - A. Less than 5% carboxyhemoglobin saturation.
 - B. No soot present in airway.
- V. Penetrating rectal trauma
- VI. Evidence of ethanol use; see Toxicology Report.

SUMMARY AND OPINION:

Ms. Victoria Martens was a 10-year-old white female who was reportedly found by law enforcement personnel in a bathtub and unresponsive. According to reports, she was wrapped in a blanket that had been set on fire in her mother's apartment. Her arms, a portion of sternum, heart, and left lobe of liver were found wrapped in a plastic bag in a laundry basket.

Autopsy revealed a well-developed, well-nourished young female wrapped in plastic bags and a charred piece of cloth. The bilateral upper extremities, heart, left lobe of liver, and sternum were received separately and wrapped in plastic bags. Multiple contusions and abrasions were present on the head, neck and torso. There were contusions on the inner lip that corresponded to the decedent's teeth. Petechiae (small pinpoint hemorrhages) were present in the eyes, mouth, and on the face. Hemorrhages involved the muscles of the anterior and posterior aspects of the neck and corresponded with overlying contusions. Hemorrhage was also found around the spinal cord. Post-mortem sharp force injuries which lacked a vital response included a large midline incision exposing internal organs, dismemberment of the bilateral upper extremities and an attempt to remove the left lower extremity at the hip (see separate forensic anthropology report). There was a spiral fracture of the left upper extremity without soft tissue hemorrhage. There was evidence of perimortem penetrating trauma to the rectum including a posterior tear and abrasions anteriorly.

Microscopic exam revealed mild hypoxic ischemic changes of the brain and viral cytopathic changes consistent with human papilloma virus (a sexually transmitted disease) in the rectum. Cytologic screening of swabs taken from the mouth, neck, chest, abdomen, vagina, back, anus and buttocks, and the thighs were all negative for spermatazoa.

Postmortem toxicology of liver tissue revealed an ethanol concentration of 210 mg/100 g. In an alcohol naïve person, this level of alcohol could cause cognitive and physical impairment. The postmortem carboxyhemoglobin level on liver was less than 5% (normal level). Laboratory testing of the vitreous fluid (eye fluid) detected no significant abnormalities of the electrolytes.

Postmortem computed tomography scans (CT scan) correlated with the autopsy findings. These findings were reviewed and a report was compiled by Dr. Gary Hatch, Forensic Radiologist (see separate radiology report).

Compression of the neck structures causes impaired blood flow to the brain and results in loss of consciousness and death. The findings of abrasions and contusions around the head and neck, hemorrhage in the neck muscles, and petechiae in areas such as the eyes or lips are consistent with manual strangulation. The sharp force injuries described above showed no vital response – a finding in keeping with being inflicted post-mortem. No soot was found in the airway and the level of Carbon Monoxide/carboxyhemoglobin was low (normal) – indicating that there was no evidence of inhalation of products of combustion. Therefore it is our opinion, based on all the currently available information and findings at autopsy, that Ms. Victoria Martens died as a result of manual strangulation. The manner of death is best classified as homicide.

Medical Investigator

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

External exam date time: 8/25/2016 9:00:00 AM
Authority for examination: OMI
ID confirmed at time of exam: No
Means used to confirm identity: Dental
Other verification means:
Location of orange bracelet: Left ankle
Name on orange bracelet: Decedent name
Other name on orange bracelet:
Location of green bracelet: Left ankle
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): 141.00
Body weight (kgs): 40.60
BMI: 20.42

Development: Well-developed
Development comments:
Stature: Well-nourished
Age: Appears to be stated age
Anasarca: No
Edema localized: No
Dehydration: No
Skin comments:
See evidence of injury.
Scalp hair color: Brown
Scalp hair length: Long
Eyes: Both eyes present
Irides: Hazel
Eyes corneae: Translucent
Eyes sclerae: White
Eyes conjunctivae: Translucent
Eyes petechiae: Yes
Palpebral petechiae: Yes
Bulbar petechiae: Yes
Facial petechiae: Yes

Oral mucosal petechiae:	Yes
Nose:	Normally formed
Ears:	Normally formed
Lips:	Normally formed
Facial hair:	None
Facial hair color:	Does not apply
Maxillary dentition:	Natural
Mandibular dentition:	Natural
Condition of dentition:	Good
Neck:	Abnormal - See Evidence of Injury
Trachea midline:	Yes
Chest development:	Normal
Chest symmetrical:	Yes
Chest diameter:	Appropriate
Abdomen:	Flat
Anus:	Other
Anus comment:	
See evidence of injury.	
Back:	Abnormal - See Evidence of Injury
Spine:	Normal
External genitalia:	Female
Breast development:	None
Breast masses:	None
Genitalia comment:	
See evidence of injury.	
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:	
See evidence of injury.	

Bilateral upper extremities received separate from torso.

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

Tattoo(s)

Tattoos present:	No
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Cosmetic Piercing(s)

Cosmetic piercing present: Yes
Cosmetic piercing right ear: Yes
Cosmetic piercing left ear: Yes

Scar(s)

Scar(s) present: Yes
Scar abdomen: Yes

External exam comment:

The bilateral upper extremities, heart, left lobe of the liver, and sternum are received separately. See evidence of injury.

Reporting Tracking

Reported by: Rebecca Asch-Kendrick, MD
Verified by: Matthew Cain, MD on 11/21/2016 9:51:17 AM
Reviewed and approved by: Matthew Cain, MD on 11/22/2016 3:42:52 PM

Medical Investigator

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

Evidence of medical intervention: No

Report Tracking

Reported by: Rebecca Asch-Kendrick, MD
Verified by: Matthew Cain, MD on 11/21/2016 9:51:28 AM
Reviewed and approved by: Matthew Cain, MD on 11/22/2016 3:42:52 PM

Medical Investigator

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

External exam date: 8/25/2016 10:07:00 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
State of preservation: No decomposition
Skin slippage: Yes

Report Tracking

Reported by: Rebecca Asch-Kendrick, MD
Verified by: Matthew Cain, MD on 11/21/2016 9:51:36 AM
Reviewed and approved by: Matthew Cain, MD on 11/22/2016 3:42:52 PM

Medical Investigator

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

Are there any injuries: Yes

Evidence of Injury:

Autopsy date: 8/25/2016 10:07:00 AM

#	Injury	Location	Injury Description
1	Mechanical asphyxia	Head and neck	<p>Evidence of Manual Strangulation:</p> <p>Behind the auricle of the left ear are multiple punctate, purple contusions. Behind the auricle of the right ear is a linear, red abrasion that measures 1.8 cm. On the left anterior aspect of the neck are multiple red-brown abrasions that range in size from 1.0 to 3.5 cm. On the left posterior aspect of the neck are multiple white and red abrasions with skin sloughing that range in size from 0.1 to 0.5 cm. On the right posterior aspect of the neck is a square, purple contusion that measures 4 x 2.5 cm.</p> <p>Internally, there are multiple foci of acute hemorrhages that involve the following:</p> <ol style="list-style-type: none"> 1. The anterior neck strap muscles including the left sternocleidomastoid, the bilateral sternohyoid and sternothyroid muscles. 2. The inferior portion of the pharyngeal constrictor muscle. 3. The subcutaneous soft tissue of the posterior neck. 4. The right erector spinae muscle. <p>There are multiple, scattered, petechial hemorrhages involving the palpebral conjunctivae, bilateral eyelids, periorbital area, and the upper gingiva.</p>
2	Blunt injury	Head	<p>Subgaleal and subscalpular hemorrhages overlie the left and right sides of the frontal bone and the left side of the occiput; no corresponding external contusion is observed.</p> <p>A small amount of hemorrhage is in the cervical epidural space.</p>
3	Sharp injury	Other	<p>The body has multiple sharp force injuries and is partially dismembered; these injuries lack an apparent vital response. The arms have been removed at the glenohumeral joint and the left leg is partially amputated. These injuries are described in the region in which they occurred.</p> <p>Torso: Starting just below the clavicle and extending to just below the umbilicus is a linear, full-thickness incised wound that measures 36 cm in length; extending inferiorly and continuously from this wound is a 5.5 cm superficial incised wound. The superior portion of the incised wound measures 7 cm wide at its widest point. This wound exposes the internal cavities of the body and internal organs. Multiple, superficial incised wounds extend roughly parallel and to the right of the previously described midline incision and average 18 cm in length. Multiple linear incised wounds, that range in size from</p>

1.5 to 3 cm, are located at 10 o'clock and at 2 o'clock to the large midline incised wound.

Examination of the chest plate reveals that a segment of sternum is absent; this segment corresponds to ribs 3-8. Additionally, ribs 2 through 8 are cut bilaterally on the anterior surface. Internally, the anterior aspect of the aorta has a linear incised wound measuring approximately 5 cm.

Around the proximal left thigh at the hip is a circumferential incision that exposes 4 cm of bone, muscle and soft tissue. The area around this injury has patchy charring of the soft tissue and muscle.

Received in a separate bag is a section of sternum, two arms, a heart, and part of the left lobe of liver. The segment of sternum corresponds to ribs 3-8 and has apparent tool markings (see separate anthropology report).

The decedent's arms have been removed from the body at the joint of the glenoid fossa and humeral head. The humeral head is present and exposed on each arm and has apparent tool markings (see separate anthropology report). Each arm has been cut circumferentially through the soft tissue and muscle. Along each cut are occasional irregular cut marks with remaining jagged skin and subcutaneous tissue. Along the cut edge are irregular linear abrasions. Each arm will be described individually.

Right arm: The right arm measures 62 cm in total length, including the cut margin and the exposed humerus. The exposed bone measures 2 cm in length from the cut edge. On the anterior aspect of the forearm are 3 abrasions measuring 0.5 cm, 1 cm, and 3 cm. On the lateral surface of the arm are scattered small scars. On the right elbow is a 1 cm red contusion, a 0.8 cm purple contusion, and an adjacent 3 cm abrasion. On the posterior aspect of the right forearm are scattered small abrasions. On the right hand are scattered abrasions.

Left arm: The left arm measures 61 cm in total length, including the cut margin and the exposed humerus. The exposed bone measures 2 cm in length and the head of the humerus has prominent apparent tool markings. On the anterior aspect of the left forearm are scattered small abrasions. On the posterior-lateral aspect of the left arm is a 1 cm abrasion and multiple scabs. On the left elbow is a 1 cm red contusion. On the left hand are scattered small abrasions.

On the anterior surface of the heart is a linear, incised wound measuring 1.5 cm. On the posterior surface of the heart are two irregular, incised wounds measuring 0.5 cm and 1.8 cm.

A portion of the left lobe of liver is also received separately. On the anterior surface of the left lobe of liver are multiple linear, incised wounds that range in size from 0.5 cm to 2.5 cm. On the posterior surface of the left lobe of liver is a 2 cm incised wound.

4	Blunt injury	Trunk	<p>Chest and abdomen: In the right axilla (underarm) are multiple, linear, superficial abrasions that measure 2 cm in length. In the lower right abdominal quadrant, abutting the central incised wound described above, is an irregular purple contusion that measures 4.5 x 2 cm.</p> <p>Genitalia: Several blunt injuries involve the both the vaginal area and anus. These are described below.</p> <p>Vagina: 1. On the clitoris is a red linear abrasion measuring 1.0 cm.</p> <p>Anus/Rectum: The posterior rectum is designated 12 o'clock and the anterior perineum is 6 o'clock in the description below. 1. At the 11 o'clock and 1 o'clock positions are partial thickness abrasions of the anus. 2. At the 6 o'clock position of the anus is a linear tear that measures 0.5 cm.</p> <p>Back: Superior to the gluteal cleft is a 6 x 3 cm irregular purple contusion.</p>
5	Thermal injury	Other	<p>Thermal Injuries</p> <p>Thermal injuries involve the torso and lower extremities; however, no soot is seen in the airway.</p> <p>On the right lateral flank is a circular area of superficial charring. There is superficial charring of the bilateral lower extremities involving 30% of the right thigh, 60-70% of the right lower leg, 30% of the left thigh, and 40% of the left lower leg.</p>

Report Tracking

Reported by: Rebecca Asch-Kendrick, MD
Verified by: Matthew Cain, MD on 11/22/2016 9:34:04 AM
Reviewed and approved by: Matthew Cain, MD on 11/22/2016 3:42:52 PM

Medical Investigator

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

Date of Autopsy: 8/25/2016 10:07:00 AM

Date of Internal Exam: 8/26/2016 9:30:00 AM

BODY CAVITIES

Chest cavities examined: Yes

See evidence of injury section: Yes

Organs in normal anatomic position: No

Other organ position comments:
The heart and liver are absent from the body cavity.

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: Yes

See evidence of medical Intervention section: No

See postmortem changes section: No

Brain fresh (g): 1295

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:	Yes
Spinal dura:	See Evidence of Injury
Spinal cord:	See Evidence of Injury

Middle Ears

Middle ears examined:	No
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Neck

Neck examined:	Yes
See Evidence of Injury section:	Yes
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No
Subcutaneous soft tissues:	See Evidence of Injury
Strap muscles:	See Evidence of Injury
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:	Yes
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):	140.0

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
Other valve comments:	
Tricuspid valve - 10.0 cm	
Pulmonic valve - 6.5 cm	
Mitral valve - 8.0 cm	
Aortic valve - 5.0 cm	
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:	Unremarkable
Ventricular septum:	Unremarkable
Right ventricular free wall thickness:	0.1 cm
Left ventricular free wall thickness:	0.6 cm
Interventricular septum thickness:	0.8 cm
Other heart comments:	See evidence of injury.

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:	Yes - See comments
Other aortic comments:	

See evidence of injury.

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):	210
Lung left (g):	160
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:	Yes
See Evidence of Medical Intervention section:	No
See Postmortem Changes section:	No
Liver (g):	900
Bile vol (mL):	
Gallstones autopsy:	No
Gallstones autopsy desc:	
Hepatic parenchyma (color):	Red-brown
Hepatic parenchyma (texture):	Unremarkable
Hepatic vasculature:	Unremarkable and free of thrombus
Gallbladder:	Unremarkable
Gallstones:	None
Intrahepatic biliary tree:	Unremarkable

Extrahepatic biliary tree: Unremarkable

Other hepatobiliary comments:

See evidence of injury.

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): 150

Stomach contents description:

Partially digested food.

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

Pancreas

Form: Normal tan, lobulated appearance

GENITOURINARY SYSTEM

Genitourinary system examined: Yes

See Evidence of Injury section: Yes

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

Kidney right (g): 70

Kidney left (g): 75

Urine volume (mL): 0

Urine description:

Urinary Bladder

Urinary bladder mucosa: Gray-tan and smooth

Female

Female: Yes

Breasts

Breast tissue: Other - See comments

Breast tissue comments:

Prepubertal breast tissue. Tanner stage II.

Female Genital Tract

Uterus: Unremarkable and non-gravid

Uterine cervix: Infantile

Fallopian tubes: Unremarkable

Ovaries: Unremarkable

Vagina: Other - See comments

Other female genital tract comments:

See evidence of injury.

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): 90

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: Tan-pink

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): 5

Adrenal left (g): 5

Size: Normal

Parenchyma: Yellow cortices and gray medullae with the expected corticomedullary ratio

MUSCULOSKELETAL SYSTEM

Musculoskeletal system examined: Yes

See Evidence of Injury section: Yes

See Evidence of Medical Intervention section: No

See Postmortem Changes section: No

Bony framework: Other - See comments

Musculature: See Evidence of Injury

Subcutaneous soft tissues: See Evidence of Injury

Other musculoskeletal system comments: See separate anthropology report.

ADDITIONAL COMMENTS

Report Tracking

Reported by: Rebecca Asch-Kendrick, MD

Verified by: Matthew Cain, MD on 11/21/2016 9:51:25 AM

Reviewed and approved by: Matthew Cain, MD on 11/22/2016 3:42:52 PM

Medical Investigator

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

Microscopic description:

Heart: No significant histopathologic findings.

Thyroid: No significant histopathologic findings.

Trachea: The sections are free of significant histopathologic abnormality, inflammation, or soot in the airway.

Lung: Non-occluding foreign plant material is in the large airways. Otherwise, the sections are free of significant histopathologic abnormality and polarizable foreign material. No soot is in the airways.

Kidney: The sections are free significant histopathologic findings and polarizable foreign material.

Liver: No significant histopathologic findings.

Skin and soft tissue: Sections from the skin on the chest at the sites of incised wounds showed no evidence of inflammation or tissue response.

Posterior vagina and lower uterine segment: Chronic inflammation and fibrosis.

Rectum: Koilocytic change consistent with human papilloma virus, chronic inflammation and pronounced vascularity.

Brain: Occasional neurons demonstrate hypoxic ischemic change. The vessels are free of inflammation.

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

Block	Tissue Location	Description	Stain
A1	Liver and soft tissue		
A2	Thyroid and trachea		
A3	Left lung and kidney		
A4	Right lung and kidney		
A5	Proximal trachea		
A6	Heart		
A7	Posterior vagina		
A8	Posterior vagina		
A9	Anterior vagina		
A10	Anterior vagina		
A11	Brain		
A12	Brain		
A13	Brain		
A14	Brain		
A15	Rectum 12 o'clock		
A16	Rectum 2 o'clock		
A17	Rectum 3 o'clock		
A18	Rectum 5 o'clock		
A19	Rectum 6 o'clock		
A20	Rectum 7 o'clock		
A21	Rectum 9 o'clock		
A22	Rectum 11 o'clock		
A23	Rectum distal		
A24	Rectum mid		
A25	Rectum proximal		
A26	Tissue from cut adjacent to midline cut		
A27	Tissue from midline cut		

Report Tracking

Reported by: Rebecca Asch-Kendrick, MD
Verified by: Matthew Cain, MD on 11/21/2016 9:51:32 AM
Reviewed and approved by: Matthew Cain, MD on 11/22/2016 3:42:52 PM

Medical Investigator

Matthew Cain, MD

Medical Investigator Trainee

Rebecca Asch-Kendrick, MD

Autopsy date: 8/25/2016 10:07:00 AM
Study type(s): Vitreous electrolyte screen
Cytology screening

Results of ancillary studies:

Sodium 121 (expected 135-150 mmol/L)
Potassium >15 (expected <15 mmol/L)
Chloride 108 (expected 105-135 mmol/L)
VUN 15 (8-20 mg/dL)
Creatinine <0.4 (0.6 – 1.3 mg/dL)
Glucose <3 (<200 mg/dL)

The sodium is marginally low but may represent postmortem change.

Cytologic screening of swabs taken from the hands, chest, abdomen, neck, back and left thigh were negative for spermatazoa.

Report Tracking

Reported by: Rebecca Asch-Kendrick, MD
Verified by: Matthew Cain, MD on 11/22/2016 2:15:36 PM
Reviewed and approved by: Matthew Cain, MD on 11/22/2016 3:42:52 PM

Medical Investigator

Matthew Cain, MD

Date of examination: 8/25/2016 10:07:00 AM**Study date:****Accession number:****Exam type:****Technique:****Comparison:****Comments:**

Martens, Victoria 2016-04676

GENERAL: Mild decomposition.**HEAD/NECK:** No intracranial hemorrhage. Cerebral edema, without herniation. Extensive intra-arterial gas. No skull, facial, or cervical spine fracture detected. No hyoid or thyroid cartilage fracture detected.**CHEST:** Gaping defect in anterior lower chest, at and just to the left of midline, through the tip of the sternum and left costochondral cartilage. The heart is absent. Moderate left and small right hemothorax. No rib, or thoracic spine fracture detected.**ABDOMEN/PELVIS:** The lower chest defect carries on an inferior direction, to a level just below the umbilicus. A portion of the left liver lobe is absent. The bowel is gas distended and protrudes through the anterior abdominal wall defect. No other solid organ injury. No free fluid. No lumbar spine or pelvic fracture detected.**EXTREMITIES:** Comminuted fracture of the distal third of the left humerus. The fracture is in three major fragments, with a somewhat triangular-shaped central fragment, as can be seen in butterfly type fractures. No other fractures in the extremities. Bilateral arm amputations at the glenohumeral joints. Deep circumferential laceration in the proximal left thigh, down to bone.**Disclaimer:** Autopsy and postmortem imaging are different techniques and therefore will not always perfectly correspond. Findings/structures not explicitly mentioned are either forensically irrelevant, normal, or were not assessed. Further specific questions may be addressed in supplementary requests.**Report Tracking**

Reported by:	Rebecca Asch-Kendrick, MD
Verified by:	Gary Hatch MD on 11/22/2016 3:42:14 PM
Reviewed and approved by:	Matthew Cain, MD on 11/22/2016 3:42:52 PM

Case Number: 2016-04676
 Decedent Name: MARTENS, VICTORIA
 Pathologist: Matthew Cain, MD
 Fellow/Resident: Rebecca Asch-Kendrick, MD
 Date of Examination: 8/25/2016 10:07:00 AM

Morphology technican(s) present

Yellow Sheet	Morphology Technician
Identification	Darla Bentzen
Autopsy	Michael Jarvis
Evidence	Darla Bentzen
Evidence	Darla Bentzen
Radiology	Darla Bentzen
Retention	Darla Bentzen
Toxicology	Michael Jarvis
Toxicology	Michael Jarvis
Toxicology	Michael Jarvis
LabOther	Michael Jarvis
Attendees	Michael Jarvis

Morphology technican supervisor(s) present

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

Autopsy attendees

Other morphology technicians present:

Michael Jarvis - Sr. Tech
Darla Bentzen - Staff Tech.
Ryan Castillo - Staff Tech.
Daniel Ward - Photo Tech.

Law enforcement officers present:

Andrew HSU
Det. Jones
Det. Wild
Det. Acata

Specimens obtained for toxicology testing

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

Special autopsy techniques

HIV serology:	No
Pericranial membrane removal:	No
Neck anterior dissection:	Yes
Neck posterior dissection:	Yes
Facial dissection:	No
Vertebral artery dissection (in situ):	No
Cervical spine removal:	No
Layered anterior trunk dissection:	Yes
Anterolateral rib arc dissection:	No
Back dissection:	Yes
Posterior rib arc dissection:	No
Extremity soft tissue dissection:	Yes
Eye enucleation:	No
Inner middle ear evaluation:	No
Maxilla or mandible resection:	No
Spinal cord removal (anterior):	Yes
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: 171

Number of autopsy photos produced by the OMI

Autopsy Photos: 223

Evidence collected

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

Personal effects

Property Type	Property Description	Property Detail
Blood	FTA Blood Card	n/a
Hair	Scalp	n/a
Fingernail Clipping	Right Hand	w/ clippers
Fingernail Clipping	Left Hand	w/ clippers
Swabs	Oral	n/a
Swabs	Anal	n/a
Swabs	Vaginal	n/a
Swabs	Other	Right Hand- Dry
Swabs	Other	Right Hand- Wet
Swabs	Other	Left Hand- Dry
Swabs	Other	Left Hand- Wet
Other	Other	Blanket & garbage bag around body
Other	Other	Paint can w/ fabric
Swabs	Other	Chest- Dry
Swabs	Other	Chest- Wet
Swabs	Other	Abdomen- Wet
Swabs	Other	Swabs- Abdomen Dry
Hair	Pubic Combing with Blue Pad and Comb	n/a
Toenail Clipping	Right Foot	w/ clippers
Toenail Clipping	Left Foot	w/ clippers
Hair	Pubic	n/a
Trace	Location	Hair- found on right arm
Trace	Location	Hair- found left thigh
Trace	Location	Hair- found on left arm
Swabs	Other	Neck Dry
Swabs	Other	Neck Wet
Other	Other	Garbage bags containing arms and organs
Trace	Location	Hairs from body bag
Swabs	Other	Left Thigh - Wet
Swabs	Other	Lower Back - Wet
Swabs	Other	Lower Back - Dry
Swabs	Other	Mid Back - Wet
Swabs	Other	Mid Back - Dry
Swabs	Other	Upper Back - Wet
Swabs	Other	Upper Back - Dry
Trace	Location	From Right Buttock
Blood	FTA Blood Card	8/26/16
Valuables	Other	No Pers. Effects to Inventory
Fingerprints	Describe	R and L inked prints
Palm Prints	Describe	R and L palms
Other Prints	Taken From	R and L feet

Clothing

Property Type	Property Description	Property Detail
Clothing	Shirt	n/a