

# MARICOPA COUNTY OFFICE OF THE MEDICAL EXAMINER 701 W. Jefferson Street Phoenix, AZ 85007

## MEDICAL EXAMINER REPORT

**DECEDENT:** Leland Charles Anthony Vallow

**CASE:** 19-05897

DATE OF EXAMINATION: 07/13/2019

TIME: 0758 Hours

PERSONS PRESENT AT EXAMINATION:

Chandler Police Department: Detective Daniel Coons, #258; Detective Nathan Moffat

493.

**CAUSE OF DEATH:**MULTIPLE GUNSHOT WOUNDS

MANNER OF DEATH: HOMICIDE

**HOW INJURY OCCURRED:** SHOT BY ANOTHER PERSON(S)

9/12/2019

Date Signed

DEREK BUMGARNER, MD MEDICAL EXAMINER

# **FINDINGS**

- I. Perforating gunshot wound of the chest
  - A. Entrance: Sternal chest; punctate abrasions present
  - B. Exit: Left back; no projectile or projectile fragments are recovered
  - C. Wound path: The projectile perforates the skin and subcutaneous tissue of the chest, the sternum, the pericardium, the right atrium and left ventricle of the heart, the lateral left aspect of the 9th thoracic vertebral body, and the subcutaneous tissue and skin of the left back
  - D. Associated injuries: Laceration and hemorrhage of the skin and soft tissues along the wound path, fracture of the sternum, left hemothorax (1550 mL blood), and fracture of the body of the 9th thoracic vertebral body
  - E. Trajectory: Right to left, front to back, and slightly downward
- II. Perforating gunshot wound of the abdomen
  - A. Entrance: Left abdomen; no soot deposition of gunpowder stippling identified
  - B. Exit: Posterior left shoulder; no projectile or projectile fragments recovered
  - C. Wound path: Skin and subcutaneous tissue of the left abdomen, the upper lobe of the left lung, the posterolateral left 4th rib and soft tissues of the left 4th intercostal space, and the subcutaneous tissue and skin of the posterior left shoulder
  - D. Associated injuries: Laceration and hemorrhage of the skin and soft tissues along the wound path, left hemothorax (1550 mL blood), and fracture of the 4th left posterolateral rib
  - E. Trajectory: Right to left, front to back, and upward
- III. Abrasions and contusions of the chest and extremities
- IV. Toxicological testing of the postmortem pleural blood is negative for ethanol, tested drugs of abuse, and select therapeutic medications
- V. Atherosclerotic cardiovascular disease, mild
- VI. Aortic valve stenosis, moderate
- VII. Evidence of medical intervention

# **SUMMARY AND OPINION**

The decedent is a 62-year-old male who was pronounced deceased on July 11, 2019. According to investigative reports, the decedent became involved in a physical altercation with family members at his residence on July 11, 2019. Another individual reportedly produced a firearm and fired at the decedent striking him. Emergency medical services were called to the scene and pronounced death without transportation to the hospital. Toxicological testing of the postmortem pleural blood is negative for ethanol, tested drugs

of abuse, and select therapeutic medications.

Based on the autopsy findings and all other investigative information received to date and as available to me, it is my opinion that the decedent, a 62-year-old male, died of multiple gunshot wounds.

It is further my opinion that the manner of death is homicide.

As with all death investigations, opinions expressed herein are amenable to change should new, reliable, and pertinent information come to light.

The Maricopa County Medical Examiner's Office is required by statute (A.R.S. § 11-594(A) (2) and (4)) to certify the cause and manner of death following completion of the death investigation of each case over which it assumes jurisdiction, and to promptly execute a death certificate, on a form provided by the state registrar of vital statistics, indicating the cause and manner of death. The form provided by the state registrar of vital statistics includes five manners of death: homicide, suicide, accident, natural, and undetermined. The determination of manner of death is a forensic determination by the pathologist predicated upon the totality of all then-known forensic evidence and other circumstances surrounding the cause of death; it is not a legal determination of criminal or civil responsibility of any person(s) for the death.

## POSTMORTEM EXAMINATION

## **CLOTHING AND PERSONAL EFFECTS**

The body is received clad in, and accompanied by, those articles and items as outlined in the separate Property Inventory List.

## **EVIDENCE OF MEDICAL INTERVENTION**

Adhesive defibrillator pads and electrocardiogram leads are on the chest, abdomen, shoulders, and lower extremities.

## **EVIDENCE OF POSTMORTEM TISSUE PROCUREMENT:**

None.

## **EVIDENCE OF POSTMORTEM DECOMPOSITION:**

None.

## **EXTERNAL EXAMINATION**

The unembalmed body is received in a plastic body bag secured by a seal bearing the number 0028929. When first viewed, the hands are covered by white paper bags that are secured at the wrists. Postmortem radiographs are obtained. A red identification band inscribed with the decedent's name and medical examiner case number is on the right ankle.

The body is that of an adequately-nourished adult male, which appears consistent with the recorded age of 62 years. The body is 71-1/2 inches in length and weighs 207 pounds (Body Mass Index- 28.1 kilograms/meters squared). The body is cool to palpation, subsequent to refrigeration. Rigor mortis is present. Postmortem lividity is posterior and fixed.

The scalp hair is shaved. Facial hair consists of a gray-brown beard. The irides appear blue. There are no periorbital petechiae. No petechiae of the bulbar or palpebral surfaces of the conjunctivae are identified. The sclerae are off-white and the corneas are clear. The nasal septum and facial skeleton are intact to palpation. The ears, nose, and lips are normally formed. The mouth contains natural dentition which is in fair condition. The oral mucosa and frenula are intact and unremarkable. The neck is without palpable masses or unusual mobility. The chest and breasts are symmetric. Gynecomastia is absent. The abdomen is flat and soft. The trunk shows evidence of injury as described below. The extremities are normally developed, symmetric, and without edema. The fingernails are intact and grossly unremarkable. The extremities show evidence of injury as described below. The penis is circumcised, and the scrotal sac appears normally formed. The external genitalia, perineum, and anus are unremarkable.

## **IDENTIFYING MARKS:**

Tattoos:

No tattoos are identified.

#### Scars:

Notable scars include a 7 inch linear scar on the left knee and a 10 inch curvilinear scar on the occipital scalp.

## **EVIDENCE OF INJURY**

## I. PERFORATING GUNSHOT WOUND OF THE CHEST:

- A. Entrance: A 1/4 x 1/4 inch ovoid laceration is on the sternal chest at a position 18-3/4 inches below the top of the head and 1/2 inch right of the anterior midline. An eccentric red abrasion, measuring up to 5/16 inch, is most prominent from the 8 o'clock to 1 o'clock positions of the wound. Minute, red, punctate abrasions are noted extending a maximum of 2-1/4 inches from the left and inferior aspects of the wound. No soot deposition is identified.
- B. Exit: A 9/16 x 3/16 inch slit-like laceration is on the left back at a position 20 inches below the top of the head and 2-1/4 inches left of the posterior midline. No projectile or projectile fragments are recovered.
- C. Wound path: The projectile perforates the skin and subcutaneous tissue of the chest, the sternum, the pericardium, the right atrium and left ventricle of the heart, the lateral left aspect of the 9th thoracic vertebral body, and the subcutaneous tissue and skin of the left back.
- D. Associated injuries: Associated injuries include laceration and hemorrhage

- of the skin and soft tissues along the wound path, fracture of the sternum, left hemothorax (1550 mL blood), and fracture of the body of the 9th thoracic vertebra.
- E. Trajectory: The trajectory of the projectile is right to left, front to back, and slightly downward.

## II. PERFORATING GUNSHOT WOUND OF THE ABDOMEN:

- A. Entrance: A 1/4 x 1/4 inch ovoid laceration is on the left abdomen at a position 27 inches below the top of the head and 2-3/4 inches left of the anterior midline. An eccentric, dark red rim of abrasion, measuring up to 3/16 inch, is most prominent from the 3 to 9 o'clock positions of the wound. No soot deposition or gunpowder stippling is identified.
- B. Exit: A 1/4 x 3/16 inch ovoid laceration is on the posterior left shoulder at a position 14 inches below the top of the head and 6-3/4 inches left of the posterior midline. An eccentric pink-white rim of abrasion, measuring up to 3/16 inch, is most prominent from the 7 o'clock to 4 o'clock positions of the wound. Radiating lacerations measuring up to 1/8 inch are noted at the superior border of the wound.
- C. Wound path: The projectile perforates the skin and subcutaneous tissue of the left abdomen, the upper lobe of the left lung, the posterolateral left 4th rib and soft tissues of the left 4th intercostal space, and the subcutaneous tissue and skin of the posterior left shoulder.
- D. Associated injuries: Associated injuries include laceration and hemorrhage of the skin and soft tissues along the wound path, left hemothorax (1550 mL blood), and fracture of the 4th left posterolateral rib.
- E. Trajectory: The trajectory of the projectile is right to left, front to back, and upward.

# III. OTHER INJURIES:

- A. Multiple purple-red contusions are on the right chest and average up to 1/2 inch in greatest dimension.
- B. Multiple red abrasions, averaging up to 1/4 inch in greatest dimension, are on the left arm.
- C. Multiple red abrasions, averaging 1/8 inch in greatest dimension, are on the dorsal right hand.
- D. Multiple red abrasions, ranging from 1/4 to 1-1/2 inches in greatest dimension are on the knees.

Injuries described above will not be repeated below.

## INTERNAL EXAMINATION

See Evidence of Injury. The body is opened by a standard Y-shaped thoracoabdominal incision. All viscera occupy their appropriate anatomic relationships.

## **ORGAN WEIGHTS:**

Brain:

1500 grams

Liver:

1575 grams

Heart:

500 grams

Spleen:

275 grams

Right lung:

575 grams

Right kidney:

175 grams

Left lung:

275 grams

Left kidney:

175 grams

## **BODY CAVITIES**

See Evidence of Injury. The thoracic and abdominal organs are in their normal anatomic positions. The body cavities contain no adhesions.

## **HEAD**

The outer surface of the scalp has no abrasions, contusions, lacerations, or other gross defects. The inner surface of the scalp is uniformly smooth and has no acute or chronic hemorrhage. The subgaleal space is flat and has no acute or chronic hemorrhage. The temporalis muscles are symmetric and have no acute hemorrhage. The skull has no fractures. The dura and dural sinuses are unremarkable externally and upon sectioning. There are no epidural, subdural, or subarachnoid hemorrhages. The leptomeninges are thin and delicate. The cranial nerves and blood vessels on the base of the brain are unremarkable. The cerebral and cerebellar hemispheres are symmetrical, and the gyri and sulci have no edema or atrophy. The gray-white matter junction is clearly demarcated throughout the cerebral hemispheres, and the cortical ribbon has no gross contusions. The white matter has no cysts, hemorrhages, necrosis, or visible neoplasms. The basal ganglia, thalami, mammillary bodies, and hippocampi are grossly normal. Sections through the cerebral hemispheres, cerebellum, and brainstem are unremarkable. The ventricles are symmetric and normally formed, and contain no blood. The upper portion of the cervical spinal cord, as viewed from the cranial cavity, is unremarkable. The bony and soft tissue connections between the head and neck are palpably stable.

## **NECK**

The neck organs are removed en bloc with the tongue. The tongue is unremarkable externally and upon sectioning. The soft tissue and strap muscles of the anterior neck are unremarkable. The lumen of the larynx is not obstructed. The epiglottis and laryngeal mucosa are smooth and unremarkable, without petechiae. The hyoid bone and laryngeal cartilages are intact. The thyroid gland is in the appropriate anatomic position and has no cysts or masses. The parathyroid glands are inconspicuous. The prevertebral fascia is unremarkable. The cervical spine is intact and appropriately aligned to palpation.

## CARDIOVASCULAR SYSTEM

See Evidence of Injury. The coronary arterial system displays a right-dominant distribution, and on sectioning there is approximately 5 to 10% luminal stenosis of the coronary arteries by calcific atherosclerotic plaque. The coronary ostia are unremarkable. The endocardium is free of mural thrombi. The foramen ovale is sealed. There is moderate calcification of the cusps of the aortic valve. The remaining cardiac valves are normally formed and without focal lesions. Serial sectioning reveals a firm, red-brown myocardium. Free wall thicknesses of the myocardium are: left ventricular free wall 1.2 cm and right ventricular free wall 0.3 cm. The interventricular septum has a maximal thickness of 1.2 cm. The aorta and its major branches and the great veins are normally distributed and unremarkable. The great vessels contain no thromboemboli. The intimal surface of the abdominal aorta has mild to moderate atherosclerosis.

## RESPIRATORY SYSTEM

See Evidence of Injury. The major bronchi are unremarkable and patent. The hilar vessels are unremarkable; thromboemboli are absent. Sectioning of the lungs reveals a pink-red, moderately congested and edematous parenchyma.

#### HEPATOBILIARY SYSTEM

The liver capsule is smooth and intact. The parenchyma is red-brown, soft, and moderately congested. The gallbladder has an unremarkable wall and mucosa. Calculi are absent. The portal tract structures are unremarkable.

## **ENDOCRINE SYSTEM**

The adrenal glands are normally situated and have no masses or hemorrhages. The golden yellow cortices are clearly demarcated from the gray-tan medullae. The pituitary gland is unremarkable.

# LYMPHORETICULAR SYSTEM

The splenic capsule is smooth, gray, and intact. The splenic parenchyma has no visible infarcts, neoplasms, or other lesions. Lymph nodes throughout the body are not enlarged.

## **GASTROINTESTINAL SYSTEM**

The esophageal mucosa is gray, smooth, and unremarkable. The gastroesophageal junction is clearly demarcated and has no ulcers, varices, or tears. The stomach contains 200 mL of brown fluid. There are no distinct tablets or capsules. The gastric mucosa contains a normal rugal architecture, and there are no ulcers within the gastric or proximal duodenal mucosa. The small and large intestines are unremarkable externally. The appendix is not identified. The pancreas is lobular and tan, is without frank hemorrhage or calcifications, and has no cysts or masses.

## **GENITOURINARY SYSTEM**

The renal capsules strip with ease to reveal smooth cortical surfaces. On sectioning, the parenchyma is red-brown and firm, and the thickness of the cortices is normal. The renal parenchyma has no cysts, infarcts, or visible neoplasms. There is good demarcation of the corticomedullary junctions. The papillae are intact, and the calyces, pelves, and ureters are unremarkable. The urinary bladder contains 50 mL of urine; the bladder mucosa is smooth and without focal lesion. The prostate gland is unremarkable. The testes are symmetrical and have no palpable cysts or masses.

## MUSCULOSKELETAL SYSTEM

See Evidence of Injury. The remaining bony framework, supporting musculature and soft tissues are unremarkable. The diaphragm is intact.

## **TOXICOLOGY**

Samples of postmortem left pleural blood, urine, and vitreous humor are collected and submitted for laboratory analysis (see also separate Toxicology Report).

#### **EVIDENCE**

A DNA blood card and a fingerprint card are obtained at the time of postmortem examination. The following items are obtained at the time of autopsy and submitted to law enforcement personnel present:

- 1. Right hand bag
- Right fingernail clippings 2.
- Left hand bag
- Left fingernail clippings with fingernail clippers 4.
- Additional DNA blood blot 5.

## **SPECIMENS**

Samples of postmortem left pleural blood, urine, and vitreous humor are retained. Representative sections of select organs are retained in formalin.

## MICROSCOPIC EXAMINATION

Histopathological specimens are not submitted.

DSB/Diskriter D: 07/13/2019 T: 07/16/2019