Medical Examiner
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State Crime Laboratory

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Medical Examiner Division

Case No: 2012-016439 / ME-0813-12 **Date of Examination:** July 30, 2012

Name: CARTER, Chavis

Age: 21 Years **Race:** Black **Sex:** Male

County: Craighead

CONCLUSIONS

CAUSE OF DEATH: Gunshot Wound of Head

MANNER OF DEATH: Suicide

August 17, 2012

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EXTERNAL DESCRIPTION:

The body was that of a normally developed, slender but muscular, young adult black male, clad in a cut t-shirt and boxer shorts. A gunshot wound to the head and medical intervention changes will be described below. The body weighed 150 pounds, measured 70 inches in length, and appeared consistent with the reported age of 21 years. The body was cold. Rigor was present and fixed in the extremities. Lividity was present and fixed on the posterior surface of the body except in areas exposed to pressure. The hands were enclosed in paper bags at initial examination. The head was normally formed. The scalp hair was arranged in tight braids and was up to a foot in length. A scanty beard and mustache were present. An ovoid, 1/2 inch long well healed scar was present on the forehead. A gunshot wound of the head will be described below; otherwise no other scars or acute non-gunshot related injury changes were present. The irides were brown. The corneae were clear. There was postmortem lateral left scleral discoloration secondary to drying. No petechiae or other eye ground changes were present. The nose and external lips were atraumatic. No inner lip trauma was present. The teeth were natural and in good dental condition. The ears were normally formed. The neck was externally normal and stable. No scars or injuries were present. The chest was externally normal, without scars or injuries. The abdomen was flat and muscular. No scars or injuries were noted. The external genitalia were those of a normal adult male without external abnormality. The lower extremities showed normal formation, without acute injuries. A 4 inch well healed scar with hash marks was present on the lateral aspect of the left ankle. Otherwise, the ankles and feet were unremarkable. The upper extremities showed normal formation. A complex design tattoo was present on the lateral aspect of the right upper arm, with letter tattoos on the inner right arm. Letter tattoos were present on the inner left arm. A group of round-ovoid well healed scars were present on the posterior aspect of the right elbow. A linear, hypopigmented epidermal scar, measuring 1 1/2 inches was present on the volar right forearm. Wrist changes will be described below. Otherwise, the hands were uninjured. The posterior surface of the body showed normal development. An ovoid, 1/2 inch well healed scar was present on the high right back. The spine appeared externally intact. The buttocks and anus were unremarkable.

EVIDENCE OF MEDICAL ATTENTION:

A secured endotracheal tube was inserted into the oral cavity and a neck brace was present around the neck. EKG defibrillator pads were present. Intravascular catheters were present in each of the antecubittal fossa and an intramedullary catheter was inserted into the pretibial left leg. A pulse ox monitor was present on the right middle finger.

EVIDENCE OF OLD INJURY:

Scars as noted above.

EVIDENCE OF RECENT INJURY:

On the anterior distal right forearm, above the wrist, were a set of parallel, faint, linear red marks, consistent with cuff marks; one measured 1 1/4 inches and the other measured 1/2 inch. They were 1/4 inch from each other. On the dorsal aspect of the right hand was a diagonally

oriented 1 1/2 inch erythematous mark, in line with it was a 3/8 inch similar area. On the dorsal left hand and wrist, between the thumb and index finger were three erythematous marks, two being linear measuring 1/2 and 3/4 inch, and one being roughly squared measuring 1 inch.

DESCRIPTION OF GUNSHOT WOUND:

An entrance gunshot wound was present on the right temporal scalp, situated just into the hairline, located 4 inches below the top of the head, 2 inches above and 3/4 inches in front of the right external auditory canal. The wound measured 7/16 x 3/4 inch and was composed of a sooty, seared, thin, abraded margin from the 12 o'clock to the 7 o'clock border, a 1/2 inch radial tear at the 5 o'clock border, a focally soot-stained marginal edge at the 3 o'clock border and a 1/4 inch radial tear at the 1 o'clock border. There was dense soot deposition in the temporal muscular soft tissue underlying the wound.

The path of the bullet was perforating, through the temporal skin and muscle, right temporal bone, creating an extensive hemorrhagic wound track along the inferior aspect of the temporal frontal brain, exited the left temporal skull and scalp 1 1/2 inches directly above the left external auditory canal, 4 1/2 inches below the top of the head, just at the border of the helix of the ear, leaving a 1/2 x 3/16 inch lacerated exit wound.

Associated with the gunshot wound was extensive hemorrhagic destruction of the brain, along the wound track; diffuse inferior cerebral subarachnoid hemorrhage, inferior cortical brain contusion extending from the frontal to occipital lobes. Cranial vault skull fractures involving the left temporoparietal skull, right coronal suture, and right frontal bone; there was extensive comminuted fracturing of the orbital plates, frontal skull, and the middle skull fossa, in a hinge-type configuration. There were mild diffuse changes of blood aspiration and endothelial flame hemorrhages of the left ventricular basilar heart endothelial surfaces.

The direction was primarily right to left, with slight backward and downward deviation.

INTERNAL EXAMINATION

The panniculus measured up to less than 1/4 inch. There were 100 ml of thin, clear red fluid present in each of the pleural cavities. No other adhesions or abnormal collections of fluid were present. The cervical and abdominal body organs were present in normal anatomic position maintained normal relationships, without evidence of direct trauma. The lungs were normally inflated.

CARDIOVASCULAR SYSTEM:

The pericardial and epicardial surfaces were smooth, glistening, and unremarkable. The pericardial sac contained a normal amount of clear, straw-colored pericardial fluid and there were no adhesions. The heart appeared to be physiologically enlarged, and was of the normal shape and configuration. The coronary arteries arose normally, followed the usual distribution and were widely patent, without evidence of significant atherosclerosis or thrombosis. The chambers and valves exhibited the usual size-position relationship. There was no wall-thickening or chamber dilation. The endocardial surfaces showed left ventricular basilar

flame hemorrhages. The papillary muscles, chorda tendinea, and valve leaflets were unremarkable. The myocardium was beefy, tan-brown, and grossly normal. The aorta and its major branches arose normally, followed the usual course and were widely patent, free of significant atherosclerosis and other abnormality. The vena cava and its major tributaries returned to the heart in the usual distribution and were free of thrombi. The heart weighed 420 g.

RESPIRATORY SYSTEM:

The pleural surfaces were smooth and glistening. The pulmonary arteries were normally developed, patent, and without thrombus or embolus. The upper and lower airways contained bloody mucus, without debris or foreign material. The mucosal surfaces were smooth, of normal coloration, and unremarkable. Hilar and carinal lymph nodes were not enlarged. The pulmonary parenchyma other than mild blood aspiration changes showed no lesions. The right lung weighed 460 g. The left lung weighed 395g.

NECK:

Examination of the soft tissues of the neck, including strap muscles, thyroid gland and large vessels, revealed no abnormalities or hemorrhage. The hyoid bone and larynx were intact. The epiglottis and vocal cords were unremarkable and the airway appeared patent.

ALIMENTARY TRACT:

The tongue was without evidence of recent injury. The esophagus was lined by gray-white, smooth mucosa. The gastric mucosa was mildly autolytic and the lumen contained 350 ml of thick tan liquid, digesting food material. The small and large bowels were grossly normal. The rectum and anus were grossly normal. The appendix was present.

LIVER AND BILIARY SYSTEM:

The hepatic capsule was smooth, glistening and intact, covering uniform, pale tan-brown parenchyma with no focal lesions. The gallbladder contained a normal amount of unremarkable appearing bile and the mucosa was normal. The extrahepatic biliary tree was grossly normal. The liver weighed 1750 g.

PANCREAS:

The pancreas had a normal uncinate shape with a tan, lobulated, glandular appearance, and was somewhat autolytic. Multiple sections showed no lesions.

GENITOURINARY SYSTEM:

The renal capsules stripped normally from the underlying pale, tan-brown cortical surfaces. The cortical widths were normal and sharply delineated from the medullary pyramids. The calyces, pelves, and ureters were unremarkable. The urinary bladder contained 150 ml of clear, yellow urine. The mucosa was gray-tan and smooth. Prostate and testes were of normal developmental character. The testes showed no trauma. Small biopsies were taken and the testes were replaced back in the scrotal sac. The right kidney weighed 130 g. The left kidney weighed 135 g.

IMMUNOLOGIC SYSTEM:

The spleen had a smooth, intact capsule covering red-purple firm parenchyma. The white pulp was not prominent. No lymphadenopathy was noted. The spleen weighed 55 g. The thymus was glandular in nature and unremarkable.

ENDOCRINE SYSTEM:

The pituitary gland was destroyed by the gunshot wound. The thyroid and adrenal glands were free of gross abnormality.

MUSCULOSKELETAL SYSTEM:

Muscles were beefy red-brown and within normal development. Other than the skull, no palpable or grossly obvious bone or joint abnormalities were noted. The cervical, thoracic, and lumbar spine showed no obvious old fractures or other abnormalities.

CENTRAL NERVOUS SYSTEM:

Examination of the scalp showed hemorrhagic changes associated with the cranial vault fractures, entrance and exit gunshot wounds. There was no epidural or collectible subdural hemorrhage present. The leptomeninges showed no evidence of purulence or other abnormality than trauma. The cerebral hemispheres, brainstem, and cerebellum were externally normally formed, without evidence of old trauma or natural disease. The cranial nerves and circle of Willis were without disease. Multiple sections through the cerebral hemispheres, brain stem, and cerebellum revealed only the above described changes of trauma. The spinal cord was not examined. The brain weighed 1320 g.

HISTOLOGY:

No sections submitted.

RADIOLOGY:

Two X-rays of the head, showing no projectile elements.

IDENTIFICATION:

By investigating agency.

EVIDENCE:

Clothing and hand bags were returned to the investigating agencies. Handprints, fingernail clippings, hair exemplars, DNA matrix card, and organ biopsies were retained. The organ biopsies included right temporal muscular soft tissue.

SPECIMENS:

Heart blood, vitreous humor, urine, and gastric contents submitted for Toxicology.

PHOTOGRAPHS:

Standard, along with wound pictures.

WITNESSES:

None.

LABORATORY RESULTS

TOXICOLOGY:

Chavis Carter:

Heart blood

Volatiles assay

Ethanol	not detected

General Toxicology

Amphetamine	0.12 µg/mL
Diazepam	< 0.05 µg/mL
Nordiazepam	< 0.05 µg/mL
Oxycodone	0.06 µg/mL

The above reported drug amounts have not been corroborated by replicate analysis.

Methamphetamine	0.38 µg/mL

Urine

Immunoassay

Amphetamines	**Positive**
Barbiturates	Negative
Benzodiazepines	**Positive**
Cannabinoids	**Positive**
Cocaine Metabolite	Negative
Opiates	Negative
PCP	Negative

FINDINGS

I. Gunshot wound of head:
   A. Entrance: Right temporal scalp.
   B. Perforating gunshot wound of head, going through the right temporal scalp and skull, right and left frontal temporal brain, exiting left temporal skull and scalp.
   C. Associated changes include extensive hemorrhagic destruction along wound track; extensive basilar skull fractures of the middle and frontal fossa, with hinge-type configuration; inferior cerebral cortex cortical contusions; linear frontal right and lateral left cranial vault skull fractures; endocardial left ventricular flame hemorrhages, mild diffuse changes of blood aspiration.
   D. Contact range of fire, with soot and searing of entrance gunshot wound and dense soot deposition in the underlying soft tissues.
   E. Bullet exited.
   F. Path: Primarily right to left, with small backward and downward deviation.

II. Erythematous handcuff marks, wrists, hands, right forearm.

OPINION:

In consideration of the circumstances of death and after autopsy of the body, it is our opinion that Chavis Carter, a 21-year-old black male, died of a gunshot wound of the head. The agencies responsible for the investigation of his death were the Jonesboro Police Department and the Craighead County Coroner's Office. They reported that he was detained during a traffic stop. He was cuffed and placed into a police car, where apparently he produced a weapon, and despite being handcuffed, shot himself in the head.

At autopsy, the cause of death was a perforating gunshot wound of the head. At the time of discharge, the muzzle of the gun was placed against the right temporal scalp. The bullet perforated the cranial cavity, causing brain injuries, skull fractures, and death. The bullet exited the left side of the head. The manner of death is based on both autopsy findings and the investigative conclusions of the Jonesboro Police Department.

MANNER OF DEATH: Suicide