

North Carolina Department of Health and Human Services  
**Office of the Chief Medical Examiner**

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**REPORT OF AUTOPSY EXAMINATION**

**DECEDENT**

**Document Identifier** B201804243  
**Autopsy Type** ME Autopsy  
**Name** Marcus Dion Smith  
**Age** 38 yrs  
**Race** Black  
**Sex** M

**AUTHORIZATION**

**Authorized By** Amy L. Beard RN **Received From** Guilford

**ENVIRONMENT**

**Date of Exam** 09/11/2018 **Time of Exam** 08:30  
**Autopsy Facility** Office of the Chief Medical Examiner **Persons Present** Dr. Craig Nelson

**CERTIFICATION**

**Cause of Death**

**SUDDEN CARDIOPULMONARY ARREST**

due to:  
PRONE RESTRAINT; N-ETHYLPENTALONE, COCAINE, and ALCOHOL USE; and HYPERTENSIVE AND  
ATHEROSCLEROTIC CARDIOVASCULAR DISEASE

**The facts stated herein are correct to the best of my knowledge and belief.**

**Digitally signed by**

Cori Breslauer MD  
Craig Nelson MD 30 November 2018 10:20

**DIAGNOSES**

- I. Sudden cardiopulmonary arrest due to prone restraint; n-ethylpentalone, cocaine, and alcohol use; and hypertensive and atherosclerotic cardiovascular disease.
  - A. History of witnessed cardiopulmonary arrest during prone restraint with hands cuffed behind back and ankles secured to cuffs with strap by law enforcement officers.
  - B. N-ethylpentalone, cocaine, and alcohol use; see Toxicology Report.
  - C. Hypertensive and atherosclerotic cardiovascular disease.
    1. Cardiomegaly (470 gm) with left ventricular hypertrophy (1.6-1.8 cm).
    2. Coronary artery atherosclerosis, mild (up to 20% stenosis in the right coronary artery).
- II. Blunt force injuries.
  - A. Minor abrasions of head, back, and legs.
  - B. Small subcutaneous hemorrhages of back and wrists.
- III. Resuscitation-related injuries.
  - A. Chest abrasions.
  - B. Bilateral anterior rib fractures.
  - C. Cardiac and pulmonary trunk contusions.

**IDENTIFICATION**

**Body Identified By**

## EXTERNAL DESCRIPTION

**Length** 71.5 inches  
**Weight** 226 pounds  
**Body Condition** Intact

The body is received in a zipped bag secured with a plastic, tamper-evident lock #4540595 (retained in save jar) and labeled with an identification tag bearing the decedent's name. In addition, an identification tag bearing the decedent's name encircles the left great toe. Identification tags bearing the name "Zachary Knight" are encircling the right wrist and right great toe. This name was initially used at the hospital because the decedent had a bus pass with this name. Positive identification as Marcus Deon Smith was made by latent fingerprint pinpoint match.

**CLOTHING AND PERSONAL EFFECTS:** The body is received unclad. Accompanying the body are cut and dirty clothes including a white T-shirt, black boxer briefs, and white sweatpants. In the left front pocket of the sweatpants are two charging cords and one nickel.

### EVIDENCE OF MEDICAL/SURGICAL THERAPY:

1. Tape covers the eyes.
2. A nasogastric tube inserts into the right naris.
3. In the mouth is an endotracheal tube secured with a tube tamer.
4. Electrocardiogram pads are on the chest (seven) and abdomen (two).
5. A defibrillator pad is on the chest and left back.
6. A chest compression monitor pad is on the chest.
7. A single-lumen intravascular catheter is in the right antecubital fossa.
8. A single-lumen intravascular catheter is in the left dorsal hand.
9. On the left second digit is a pulse oximeter sensor.
10. In the right anterior lower leg is an intraosseous catheter.

The body is that of a normally developed, well-nourished, dark-complexioned man appearing consistent with the listed age of 38 years. The body is cold, well-preserved, and has not been embalmed. Rigidity is moderate in the jaw and extremities. Assessment of lividity is limited by skin complexion, although it appears pink-purple, blanching, and in a posterior distribution.

The black, curly scalp hair measures up to 1/4" in length. The black beard measures up to 1" in length. The ears are normally formed and without drainage. The left ear has multiple piercings. The irides are brown, corneas cloudy, and sclerae congested. The bulbar and palpebral conjunctivae are free of petechiae. The nose is intact and the nares unobstructed. The lips are normally formed. The superior and inferior frenula are intact. The teeth are natural and in good condition. Tooth #11 has a yellow metal cap. The neck is symmetrical and without evidence of injury.

The chest is normally formed, symmetrical, and without palpable masses. The abdomen is flat, soft and without palpable masses. The external genitalia are those of an adult male and are atraumatic. Both testes are palpable in the scrotum. The back is straight and symmetrical. The anus is atraumatic.

The arms are normally formed. No needle punctures or track marks are seen. The fingernails are short, trimmed, and clean. The legs are normally formed and without amputation, edema, or deformity. The toenails are short, trimmed, and clean.

**IDENTIFYING MARKS AND SCARS:** On the left forehead is a 7/8" linear, hypopigmented scar. On the right lateral upper arm is a black tattoo of indecipherable writing. Over the right second and third metacarpal-phalangeal joints are two linear, hypopigmented scars, measuring 3/8" and 1/8", respectively. Extending from the left shoulder to the left hand is a black sleeve-style tattoo of indecipherable designs and writing. On the left anterior forearm is a 1 1/2 x 1/4" puckered, hyperpigmented scar. On the right anterior lower leg is a black tattoo of Marvin the Martian and "Looney". On the lateral left thigh is a 1/2 x 1/4" pink, hypopigmented scar. On the anterior left lower leg is a black tattoo of Daffy Duck and "Toon\$".

## **INJURIES**

On the right forehead is a 2 1/2 x 3/4" area of continuous superficial, irregular red-brown abrasions. On the left upper back is a 3" linear, dark red abrasion. On the posterior right lower leg is a 3/4 x 1/2" superficial brown abrasion. On the left knee are two red-brown, superficial abrasions, one measuring 3/8 x 3/8" and the other measuring 1/2 x 1/2".

Layered dissection of the soft tissues and musculature of the back, buttocks, wrists, and ankles is performed. The right upper back has a 5/8 x 3/8" subcutaneous hemorrhage. The medial right wrist has two red, subcutaneous hemorrhages measuring 1 1/2 x 3/8". The medial left wrist has two subcutaneous hemorrhages measuring 1 x 3/8" and 3/4 x 1/4".

Associated with attempted resuscitation is a 2 1/2 x 1" C-shaped brown abrasion/contusion on the mid-chest. Also, the right 2nd and 4th ribs and left 2nd, 3rd, and 4th ribs are fractured anteriorly. On the anterior left ventricle and pulmonary trunk are numerous small contusions also associated with resuscitation.

## **DISPOSITION OF PERSONAL EFFECTS AND EVIDENCE**

### **The following items are released with the body**

None.

### **The following items are preserved as evidence**

Released to State Bureau of Investigation Agent Earl Sam on 09/11/2018:

- Clothing (T-shirt, boxer briefs, and sweatpants).
- Charging cords x2.
- Nickel x1.
- Pulled scalp hair.
- Blood card.

## **INTERNAL EXAMINATION**

### **Body Cavities**

The abdominal fat layer measures up to 2 cm in thickness. The body cavities have no hemorrhage or abnormal fluid. The serosal surfaces are smooth, glistening, and without adhesions. The organs are normally located. The diaphragm is intact.

### **Cardiovascular System**

**Heart Weight** 470 grams

The heart has a conical shape with a smooth, glistening epicardium. The coronary arteries have a normal origin and distribution with right dominance. The right coronary artery has up to 20% stenosis by yellow, non-calcified atherosclerotic plaque in the mid-portion. The left anterior descending coronary artery and the left circumflex coronary artery have no atherosclerosis and are widely patent.

The myocardium is red-brown, firm, and uniform without focal fibrosis, softening, or hyperemia. The ventricles are hypertrophied. The right ventricle, left ventricle, and interventricular septum measure 0.3 cm, 1.6 cm, and 1.8 cm, respectively.

The endocardium is intact, smooth, and glistening. The cardiac valve leaflets are of normal number, pliable, intact, and free of vegetations. The atrial and ventricular septa are free of defects.

The aorta follows its usual course and has no atherosclerotic changes. No vascular anomalies or aneurysms are identified. The venae cavae and pulmonary arteries are without thrombus or embolus.

### **Respiratory System**

**Right Lung Weight** 1170 grams

**Left Lung Weight** 1010 grams

The tongue, strap muscles, and other anterior neck soft tissues have no hemorrhage. The hyoid bone and the cartilaginous structures of the larynx and trachea are normally formed and without fracture. The cervical vertebrae have no displacement, hypermobility, or crepitus. No prevertebral soft tissue hemorrhage is apparent.

The lungs have the usual lobation. The pleurae are smooth and glistening. The lungs have mild anthracotic pigment.

The lungs are well-expanded and crepitant. The parenchyma is dark red and exudes a moderate amount of red, bloody fluid. The lungs have no consolidation, hemorrhage, infarct, tumor, gross fibrosis, or enlargement of air spaces. The airways are unobstructed, lined by smooth, red-brown mucosa, and contain no foreign materials.

### **Gastrointestinal System**

The esophagus and gastroesophageal junction are unremarkable. The stomach contains approximately 50 mL of dark red-brown blood-like fluid without visible pills or pill residue. The gastric and duodenal mucosae are intact and unremarkable. The small and large intestines are opened along their lengths and demonstrate an unremarkable mucosa and contain no foreign material. The appendix is unremarkable.

### **Liver**

**Liver Weight** 2000 grams

The intact hepatic capsule is smooth and glistening. The parenchyma is red-brown and uniform without mass, hemorrhage, yellow discoloration, or palpable fibrosis. The gallbladder contains brown mucoid bile and no stones. Its mucosa is uniform, and the wall is not hypertrophied.

### **Spleen**

**Spleen Weight** 120 grams

The splenic capsule is smooth and intact. The parenchyma is maroon, soft, and uniform.

### **Pancreas**

The pancreas has normal size, shape and lobulated structure. The parenchyma is pink-tan, soft and uniform.

### **Urinary**

**Right Kidney Weight** 210 grams

**Left Kidney Weight** 210 grams

The kidneys have a normal shape and position. The cortical surfaces are smooth with persistent fetal lobulations. The kidneys have the usual corticomedullary structure without tumors or cysts. The pelves and ureters are not dilated or thickened. The bladder contains approximately 50 mL of clear, yellow urine. The mucosa is intact and the bladder wall is not hypertrophied.

### **Reproductive**

The prostate gland is of average size and is grossly unremarkable.

### **Endocrine**

The thyroid gland is not enlarged, and the lobes are symmetrical. The parenchyma is uniform, firm, and red-brown. The adrenal glands have the usual size and shape. The cortices are thin, uniform, and yellow, and there is no hemorrhage or tumor. The pituitary gland is not enlarged.

### **Neurologic**

**Brain Weight** 1570 grams

The scalp is free of hemorrhage. The calvarium and base of the skull are normally formed and without fractures. The dura is intact with no epidural or subdural hemorrhage.

The leptomeninges are glistening and transparent without underlying hemorrhage, exudate, or cortical contusions. The hemispheres are symmetrical and have a normal gyral pattern. There is no flattening of the gyri, narrowing of the sulci, midline shift, or evidence of herniation. The arteries at the base of the brain have no atherosclerotic changes or aneurysms.

Sections through the cerebral hemispheres have a uniform, intact cortical ribbon and uniform white matter. The basal ganglia, thalami, hippocampi and other internal structures are symmetrical and without focal change. The ventricles are not enlarged, and the linings are smooth and glistening. Sections of the brainstem and cerebellum show an intact structure without focal lesions.

### **Immunologic System**

No enlargement of the lymph nodes of the neck, chest, or abdomen are identified. The thymus is an appropriate size for age.

### **Musculoskeletal System**

Layered dissection of the soft tissues of the musculature of the back, buttocks, wrists, and ankles demonstrate the injuries previously noted. The musculoskeletal system is well-developed and free of deformity. The clavicles, sternum, vertebrae, and pelvis are not fractured; there are resuscitation-related rib fractures as previously noted. The ribs are not brittle. The skeletal muscle is dark red and firm.

## **MICROSCOPIC EXAMINATION**

### **Microscopic Comment**

Slide key:

A1: Left and right ventricle.

A2: Left and right lung, kidney.

A3: Liver, cerebellum.

### **Cardiovascular**

One section each of left and right ventricular myocardium shows orderly myocytes with multifocal contraction band necrosis. There is no inflammation or fibrosis.

### **Respiratory**

One section of each lung shows normal alveoli without inflammation. In one of the sections, alveoli are filled with proteinaceous fluid. Septa are congested, but thin and delicate. Some alveoli contain extravasated red blood cells. Vessels contain occasional fat droplets. Examination under polarized light shows no accumulation of crystalline material.

### **Liver**

One section of liver shows unremarkable hepatocytes with a few scattered macrovesicles. Portal areas have no inflammation or fibrosis.

### **Genitourinary**

One section of kidney shows normocellular glomeruli without inflammation. Tubules are unremarkable other than autolysis. The interstitium has no inflammation or fibrosis. Vessels are unremarkable.

### **Neurologic**

One section of the cerebellum is unremarkable.

## **SUMMARY AND INTERPRETATION**

According to medical records, Greensboro Police Department Incident/Investigation report, information from law enforcement, and review of video from the scene, this 38-year-old man had a history of hypertension, smoking, and alcoholism. It was also reported that he was known to use cocaine and "molly," a term that typically refers to MDMA, or "ecstasy." He had previously been hospitalized for combativeness or substance-induced delirium following drug use including methamphetamine, cocaine, and "molly."

On 09/08/2018 at 0042 hours, Greensboro Police officers patrolling a folk festival found the decedent found the decedent running in and out of traffic, stating he wanted to kill himself, and apparently very agitated. He stated that he wanted to go to the hospital and was placed in a patrol vehicle. Emergency Medical Services (EMS) were summoned; on their arrival, the decedent was screaming and hitting the windows of the vehicle. Officers opened the door of the vehicle and the decedent exited. Multiple officers then placed him prone on the ground. His hands were then cuffed behind his back, and a strap was placed on his ankles to secure them to the handcuffs behind his back. No chokeholds or conducted electrical weapons were applied. During this process, the decedent was grunting loudly, then more quietly. After restraints were applied, officers checked on him and found that he was unresponsive (not breathing, but with a pulse). The restraints were removed, and he was placed on the EMS stretcher and loaded into a waiting ambulance. CPR was started in the ambulance. He was transported to Moses Cone Hospital. Despite continued attempted resuscitation, death was pronounced in the emergency department.

The autopsy documented abrasions of the head and extremities as well as subcutaneous hemorrhages of the medial wrists. No hemorrhage was identified on layered dissection of the back, buttocks, or ankles. He also had injuries from attempted resuscitation, including a chest abrasion, rib fractures, and contusions of the heart and pulmonary trunk.

Findings of hypertensive and atherosclerotic cardiovascular disease included cardiomegaly (470 gm) with left ventricular hypertrophy (1.6-1.8 cm). He had mild coronary artery atherosclerosis (20% stenosis of the right coronary

artery). Toxicological testing detected n-ethylpentalone (a drug commonly sold purported to be MDMA/ecstasy), a low level of the cocaine metabolite benzoylecgonine, and a blood alcohol level of 30 mg/dL.

Based on the autopsy findings and circumstances surrounding the death, as currently understood, the cause of death is listed as sudden cardiopulmonary arrest due to prone restraint; n-ethylpentalone, cocaine, and alcohol use; and hypertensive and atherosclerotic cardiovascular disease. The manner of death is classified as homicide.

## **DIAGRAMS**

1. Adult MALE autopsy diagram

B 18-4243  
 Examined by CS Date: 9/11/18

**ADULT MALE AUTOPSY DIAGRAM**

IDENTIFICATION:  ID checked

A - abrasion

