



**Department of Pathology and Lab Medicine**  
165 Ashley Avenue, Suite 309  
MSC 908  
Charleston, SC 29425-9080

Req.: xAutopsy, For Coroner  
Add.: xAutopsy, For Coroner  
Loc: AHAM  
Client: AHAM-Hampton County Coroner

Patient: SMITH, STEVEN N.  
Med Rec: SMISTE070815  
DOB: 1/29/1996 (Age: 19)  
Sex: M Race: White

## Autopsy Final Report

Accession Number: **FA15-436**

Date and Time of Autopsy: 7/8/2015 12:30

Hospital/County: AHAM-Hampton County Coroner  
Service: Laboratory  
Submitting Physician: xAutopsy, For Coroner  
Attending Pathologist: S.Erin Presnell, M.D. (1-4391)  
Date/Time of Death: 7/8/2015 EARLY AM  
Autopsy Reason: Requested by Coroner  
Authorized By: Ernie Washington, Coroner  
Autopsy Technician: Mr. Raymond Edwards  
Autopsy Restrictions: None

At work: no

### Diagnosis

- Brainstem rent (stretch) with associated parenchymal hemorrhages
- Cerebral contusion (right temporal lobe)
- Extensive skull fractures
- Scalp and subgaleal hemorrhage
- Right forehead laceration with posterior undermining
- Irregular abrasions and contusions of right and left arms
- Right shoulder dislocation
- Blood in airways
- Head x-rays: no projectiles
- Gallbladder cholesterosis
- Postmortem toxicology: negative

### Cause of Death

Blunt head trauma

*Due to*

Motor vehicle crash, pedestrian vs. vehicle

### Manner of Death

Undetermined

### Case History

According to the coroner, the decedent was a 19-year old-male who was reported to be lying in the road by a passerby driving a wrecker around 4 a.m. on July 8, 2015. Authorities responded; he was deceased at the scene. The decedent's car was ~ 2 – 3 miles down to the road and was out of gas; the decedent appeared to be heading to his home. Please see the coroner's report for additional details.

### Gross Description

#### Department of Pathology and Laboratory Medicine

Chair: Steven L. Carroll, M.D., Ph.D.

Anatomic Pathology  
Phone: 843-792-3821  
Fax: 843-792-8974

Autopsy Pathology  
Phone: 843-792-3556  
Fax: 843-792-8974

Client Services  
Phone: 843-792-0707  
Fax: 843-792-4896

Clinical Pathology  
Phone: 843-792-0707  
Fax: 843-792-4896

Patient: SMITH, STEVEN N.

Med Rec: SMISTE070815

Location: AHAM

**SMITH, STEVEN N.****EXTERNAL EXAMINATION**

The body is that of a well-developed, well-nourished, teenaged white male, who weighs approximately 152 pounds, is 69.5 inches in length, and appears compatible with the stated age of 19 years. The body is identified by the coroner. The body is clad in khaki shorts; a black sneaker on the left foot (matching right sneaker accompanies the body); and a black Nike t-shirt. Two paper bags are around the hands (removed for gunshot residue swabbing by SLED personnel).

The body is warm to the touch. Rigor is partially fixed (3/4) in all extremities and jaw. Diffuse, unfixed purple livor extends over the posterior surfaces of the body, except in areas exposed to pressure. The scalp hair is blonde and up to 5.5 inch in length over the crown. The irides are blue; the right pupil is larger in diameter than the left. The corneae are clear. The sclerae and conjunctivae are unremarkable. The nose and ears are not unusual. The lips and gums are intact. The teeth are in good condition. The deceased has beard and mustache stubble. The neck is without masses, and the larynx is in the midline. The thorax is symmetrical with an anteroposterior/lateral ratio of about 1:2. The abdomen is flat. The penis is unremarkable; the testes are bilaterally descended within the scrotum. The anus and back are unremarkable. The upper and lower extremities are well-developed and symmetrical, without absence of digits. Few striae distensae are over the anterior shoulders. A 0.6 inch scar is on the medial left knee. Evidence of emergency resuscitation and / or medical therapy is absent.

**EVIDENCE OF INJURY:** A 7.25 inch laceration extends across the superior mid to right lateral forehead, involving the right eyebrow; posterior undermining is marked. Bilateral periorbital hematomas are present. Reflection of the scalp reveals bilateral frontal, parietal, and occipital and right temporalis scalp and subgaleal hemorrhages. Fracture extends along the lateral right frontal/orbital bone, right temporal, and to the posterior aspect of the occipital bone. Patchy subarachnoid hemorrhage is over the right cerebral hemisphere and basilar cerebrum. Cerebral contusions are on the inferior aspect of the right temporal lobe. The brainstem shows stretching at the midbrain-pons junction, with associated parenchymal hemorrhages. Basilar skull fractures involve all cranial fossae, and include the cribriform and orbital plates, sphenoid and sellar turcica, petrous ridges, and occipital bones.

The right shoulder is dislocated. A 6 inch irregular contusion is on the anterior right arm. A 12 - 3 inch aggregate of irregular to angulated abrasions is over the dorsal right arm, with contusion noted proximally. Contusions up to 1.5 inch each affect the dorsal right 4<sup>th</sup> and 5<sup>th</sup> fingers. A 9.5 x 2.5 inch aggregate of irregular abrasions is over the dorsal left forearm and hand.

**RADIOGRAPHS:** AP and lateral x-rays of the head show no radiopaque projectiles.

**EVIDENCE TRANSFER:** The following items are transferred to the Colleton County Deputy Coroner Kelly Green, who attended the autopsy on July 8, 2015: khaki shorts; two black sneaker; black Nike t-shirt; paper bags are from hands; right and left fingernail clippings; pulled scalp hair; oral, rectal, and penile swabs (4 each); dried blood spot on filter paper; and a CD with the digital autopsy images.

**INTERNAL EXAMINATION**

**BODY CAVITIES:** No adhesions or abnormal collections of fluid are in any of the body cavities. All body organs are present in normal anatomical positions.

**HEAD (CENTRAL NERVOUS SYSTEM):** The brain weighs 1400 grams. Excluding disruption in some areas of skull fracture, the dura mater and falx cerebri are intact and the leptomeninges are thin and delicate. The cerebral hemispheres appear symmetrical. Excluding the findings described under 'Evidence of Injury,' the structures at the base of the brain, including cranial nerves and blood vessels, are intact and free of abnormality. Sections through the cerebral hemispheres reveal no organic lesions within the cortex, subcortical white matter, or deep parenchyma of either hemisphere. The basal ganglia, thalami, and hippocampi are unremarkable. The cerebral ventricles are normal caliber. Sections through the cerebellum are unremarkable.

**NECK:** Examination of the soft tissues of the neck, including strap muscles, thyroid gland, and large vessels, reveals no abnormalities. The hyoid bone and larynx are intact. The lingual mucosa is intact; the underlying firm red-brown musculature is devoid of hemorrhage.

**CARDIOVASCULAR SYSTEM:** The heart weighs 300 grams. The pericardial and epicardial surfaces are smooth, glistening and unremarkable; the pericardial sac is free of significant fluid or adhesions. The coronary arteries arise normally, follow the usual distribution and are patent, without evidence of significant atherosclerosis or thrombosis. The chambers and valves bear the usual size-position relationships and are unremarkable. The myocardium is dark red-brown, firm, and unremarkable; the atrial and ventricular septa are intact. The left ventricular thickness = 1 cm, right ventricular thickness = 0.5 cm, and the interventricular septum = 1.1 cm. The aorta and its major branches arise normally, follow the usual course and are patent, free of significant

Department of Pathology and Laboratory Medicine

Chair: Steven L. Carroll, M.D., Ph.D.

Anatomic Pathology  
Phone: 843-792-3821  
Fax: 843-792-8974

Autopsy Pathology  
Phone: 843-792-3556  
Fax: 843-792-8974

Client Services  
Phone: 843-792-0707  
Fax: 843-792-4896

Clinical Pathology  
Phone: 843-792-0707  
Fax: 843-792-4896

Patient: SMITH, STEVEN N.

Med Rec: SMISTE070815

Location: AHAM

**SMITH, STEVEN N.**

atherosclerosis and other abnormality. The venae cavae and their major tributaries return to the heart in the usual distribution and are free of thrombi.

**RESPIRATORY SYSTEM:** The right and left lungs weigh 420 and 360 grams, respectively. The airways contain blood and froth but are otherwise clear of debris and foreign material; the mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces are smooth and glistening, with blood accumulation in the posterior aspects of the lung lobes. Lobar divisions are of the usual configuration. The pulmonary parenchyma is dark red-purple, exuding slight to moderate amounts of blood and frothy fluid; no focal lesions are noted. The pulmonary arteries are normally developed, patent, and without thrombus or embolus.

**LIVER AND BILIARY SYSTEM:** The liver weighs 1330 grams. The hepatic capsule is smooth, glistening and intact, covering red-brown parenchyma, with no focal lesions noted. The gallbladder contains 5 ml of red-brown, slightly mucoid bile; the mucosa demonstrates cholesterosis. The extrahepatic biliary tree is patent, without evidence of calculi. The portal vein and its tributaries are unremarkable.

**ALIMENTARY TRACT:** The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds, and the lumen contains ~ 20 ml of thick tan fluid and a blue gum fragment. The small and large bowel are unremarkable. The appendix is present. The pancreas has a normal yellow-tan, lobulated appearance, and the ducts appear clear.

**GENITOURINARY TRACT:** The right and left kidneys weigh 90 and 110 grams, respectively. The renal capsules are smooth and thin, semi-transparent, and strip with ease from the underlying, smooth, red-brown, firm, cortical surfaces. The cortices are delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelvis, and ureters are unremarkable. The relationships at the trigone are unremarkable. The urinary bladder contains 100 ml of dark yellow urine; the mucosa is gray-tan and smooth. The prostate and seminal vesicles are unremarkable.

**RETICULOENDOTHELIAL SYSTEM:** The spleen weighs 140 grams and has a smooth, intact capsule covering red-purple, moderately firm parenchyma; the lymphoid follicles are unremarkable. The regional lymph nodes appear normal. The bone marrow is red-purple and homogeneous, without evidence of focal abnormality.

**ENDOCRINE SYSTEM:** The pituitary, thyroid, and adrenal glands are unremarkable.

**MUSCULOSKELETAL SYSTEM:** Excluding the findings described under 'Evidence on Injury,' the bony framework, supporting musculature, and soft tissues are not unusual.

SEP:mtr  
07/08/15  
08/13/15

**Case Summary**

A complete autopsy was performed on the body of Steven N. Smith at the Medical University of South Carolina Autopsy Suite on July 8, 2015. The postmortem examination began at 12:30 p.m. The prosector was Dr. S. Erin Presnell. The autopsy technician was Mr. Raymond Edwards. The autopsy was authorized by the Hampton County Coroner, Mr. Ernie J. Washington, Sr.

Significant findings at autopsy included brainstem rent (stretch) with associated parenchymal hemorrhages; cerebral contusion (right temporal lobe); extensive skull fractures; scalp and subgaleal hemorrhage; right forehead laceration with posterior undermining; irregular abrasions and contusions of the right and left arms; right shoulder dislocation; and blood in the airways. X-rays of the head and neck showed no radiopaque projectiles. Other findings included gallbladder cholesterosis.

A urine screen for common drugs of abuse was negative. Toxicologic analysis of peripheral blood was negative. Blood ethanol was negative.

In light of the historical information and the autopsy findings, it is the opinion of the pathologist that the decedent died as the result of blunt head trauma sustained in a motor vehicle crash in which the decedent was a pedestrian struck by a vehicle. Pending further investigation, the manner of death is best left undetermined.

**Certification Statement**

I certify that I personally conducted the diagnostic evaluation of the above specimen(s) and have rendered the above diagnosis(es).

S.Erin Presnell, M.D. (1-4391)  
(Electronically signed by)

Department of Pathology and Laboratory Medicine  
Chair: Steven L. Carroll, M.D., Ph.D.

Anatomic Pathology  
Phone: 843-792-3821  
Fax: 843-792-8974  
Patient: SMITH, STEVEN N.

Autopsy Pathology  
Phone: 843-792-3556  
Fax: 843-792-8974

Client Services  
Phone: 843-792-0707  
Fax: 843-792-4896

Clinical Pathology  
Phone: 843-792-0707  
Fax: 843-792-4896

Med Rec: SMISTE070815

Location: AHAM

**SMITH, STEVEN N.**

---

**FA15-436**

Verified: 08/14/2015 08:39  
MR/7/9/2015