TOXICOLOGY REPORT Office of the Chief Medical Examiner Toxicology Folder: T200902254 Chapel Hill, NC 27599-7580 Case Folder: F200902362 Date of Report: 04-may-2009 Page: 1 DECEDENT: Taraha Shenice Nicholson Status of Report: Approved Report Electronically Approved By: Ruth Winecker, Ph.D. * * * _____ SPECIMENS received from William R. Oliver on 23-mar-2009 S090007144: 19.0 ml Blood CONDITION: Postmortem SOURCE: Aorta OBTAINED: 11-mar-2009 ** Comments Concerning This Specimen ** Specimen was received in a leaking container. ** End of Comments Concerning This Specimen ** Benzodiazepines ----- None Detected EIA 05/04/2009 Benzoylecgonine ----- 1.6 mg/L 05/04/2009 Cocaethylene ----- None Detected 05/04/2009 Cocaine -----0.12 mg/L 05/04/2009 Ethanol ----- None Detected 05/04/2009 Nicotine ----- Present 05/04/2009 Opiates ----- None Detected EIA 05/04/2009 Other Organic Bases ----- None Detected 05/04/2009 Oxymorphone ----- None Detected EIA 05/04/2009 S090007145: Liver CONDITION: Postmortem SOURCE: OBTAINED: 11-mar-2009 ** Comments Concerning This Specimen ** Specimen was received in a leaking container. ** End of Comments Concerning This Specimen ** TOXICOLOGY REPORT Office of the Chief Medical Examiner Toxicology Folder: T200902254 Chapel Hill, NC 27599-7580 Case Folder: F200902362 Date of Report: 04-may-2009 Page: 2 Decedent: Taraha Shenice Nicholson

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ECU School of Medicine

Department of Pathology and Laboratory Medicine Greenville, NC 27858-4354 Telephone 252-744-4655

REPORT OF AUTOPSY EXAMINATION

DECEDENT

Document Identifier B200900372

Autopsy TypeME AutopsyNameTaraha Shenice NicholsonAge28 yrsRaceBlackSexF

AUTHORIZATION

Authorized By John W. Surles MD

Received From

Edgecombe

ENVIRONMENT

Date of Exam03/11/2009Time of Exam14:00Autopsy FacilityBrody School of Medicine at East Carolina UniversityPersons PresentColleen Tetterton,PA; Lisa Leone; Maxx Toler; See external examination for complete list of observers.Colleen Tetterton,

CERTIFICATION

Cause of Death Strangulation

The facts stated herein are correct to the best of my knowledge and belief. Digitally signed by

William R. Oliver MD 28 July 2009 11:16

DIAGNOSES

- 1. Anatomic changes consistent with strangulation
 - 1. Fracture, hyoid bone
 - 2. Hemorrhage, left side of neck
- 2. Linear abrasions, multiple, consistent with dragging of body
- 3. Subdural hemorrhage
- 4. Toxicology positive for cocaine
- 5. Status post cholecystectomy

IDENTIFICATION

Body Identified By

Dental Exam

EXTERNAL DESCRIPTION

Length 68 inches

Weight 201 pounds

Body Condition Decomposed

Rigor Faded

Livor Difficult to evaluate due to skin coloration and decompositional change but appears to be more prominent in a right lateral recumbant pattern. It does not blanch to palpation.

Hair Black and measures approximately 3-1/2 inches over the crown.

Eyes Brown with prominantly cloudy corneas. The pupils are 5 mm and equal.

Teeth Natural and in poor repair. The teeth are charted.

List of additional attendees:

In addition to the list above, the following individuals were present on March 10, 2009 (listed here because of length):

- Special Agent Justin Davis Godwin, North Carolina State Bureau of Investigation
- Special Agent Pat Johnson Matthews, North Carolina State Bureau of Investigation
- Intern Darrell Terrell Ward of the North Carolina State Bureau of Investigation
- Detective Gene Harrell, Edgecombe County Sheriff's Office
- Detective Gary Brady, Edgecombe County Sheriff's Office
- Intern Jessica Nichole Chamblee of the Edgecombe County Sheriff's Office
- Forensic Specialist Earl Lavoie of the Greenville Police Department
- Professor D. Wes Watson, Entomologist at North Carolina State University

Presentation:

The body is received partially clothed, in the supine position and contained within a white zippered remains pouch which is in turn within a green zippered remains pouch with the green pouch sealed. The body is wearing a black bra which has been rolled up above the breasts and one pair of white socks. An elastic hair band is noted present within the hair. No other articles of clothing are present on the body. No other personal effects are noted.

The body is that of an unembalmed, well-developed, well-nourished African-American female, appearing consistent with the recorded age of 27 years. The body has been refrigerated and is cool to the touch.

Therapeutic Intervention:

There is no evidence of therapeutic intervention.

Identifying Marks:

- A tattoo of the word "Tara" is over the lateral aspect of the upper arm on the left.
- A tattoo of uncertain lettering is over the lateral aspect of the upper arm on the right.
- There is a 0.5 cm semilunar scar over the base of the umbilicus
- There is a 1 inch horizontally oriented scar over the right upper quadrant of the abdomen.

General Description:

The body is in an early decompositional stage without significant bloating but with prominent skin drying artifact over the breasts and animal depredation over the left maxilla and mandible. There is prominent deposition of soil and leaves over the right side of the face and the right lateral aspect of the body, more prominent over the hips and upper lateral thigh on the right.

The area of depredation over the left side of the face measures approximately 4 x 4 inches. The head is otherwise normocephalic. The face is otherwise normal in appearance. There is trauma to the face as described in "Injuries". The nasal and facial bones are without palpable fracture. Contact lenses are not noted. The sclerae are anicteric. The conjunctivae are pale and without petechiae. Periorbital hemorrhage is not noted. The septum of the nose is in the midline. The nasal vestibules are free of fluid though numerous maggots are noted within the nares. The lips, gums, teeth, tongue and buccal mucosa are remarkable for the presence of prominent animal depredation. There is trauma to the right maxilla as described in "Injuries". Examination of the remaining portions of the lips reveals no obvious trauma, though evaluation is limited due to the degree of decomposition. The frenula are intact. The ears are normally formed, normally situated on the head, and are pierced.

The neck is symmetric, and the trachea is in the midline. The neck displays trauma as described in "Injuries".

The torso is symmetric and displays trauma as described in "Injuries". The abdomen is mildly convex and is without palpable organomegaly. There is trauma as described in "Injuries". The external genitalia are those of a normally developed adult female. The vaginal introitus is without obvious trauma. The inguinal regions and buttocks are unremarkable. The anus appears to be without trauma.

The upper and lower extremities are symmetric, muscular, well-developed and display trauma as described in "Injuries". The hands and feet are normally formed. All digits are present. The hands display early mummification. The fingernails are cut very short. The toenails are well-manicured and without fracture.

The back is free of significant spinal deformity.

INJURIES

Examination of the face reveals scattered linear abrasions oriented primarily horizontally though somewhat obliquely (running slightly downwards and anteriorly) associated with focal contusion over the right maxilla and right mandibular ramus. The linear injury over the right maxilla measures 2-1/2 inches in length and is present approximately 5-1/2 inches below the top of the head. It is surrounded by a 1 inch corona of contusion. There is broad darkening of the skin of the chin and jaw on the left suggestive of contusion covering an area measuring $4 \times 1-1/2$ inches. There are scattered linear abrasions of essentially random orientation with a mild preponderance of roughly circumferentially oriented lesions over the face measuring up to 2-1/4 inches with minimal vital reaction.

Upon reflection of the scalp, no subgaleal contusion is noted. Upon removal of the calvarium, there is a fine sheen of subdural blood over the occiput. No subarachnoid hemorrhage is noted.

Examination of the neck reveals a broad area of skin drying in an area of contusion over the base of the sternocleidomastoid approximately 8-1/2 inches below the top of the head and 2-1/2 inches to the left of the midline. Examination of the subcutaneous tissue in that area reveals focal hemorrhage. There is prominent drying artifact over the anterior aspect of the neck immediately to the right of the midline beginning approximately 9-1/2 inches below the top of the head covering an area measuring $2-1/2 \times 1-1/8$ inches. Examination of the subcutaneous tissue reveals a minute amount of blood.

Layered dissection of the anterior neck reveals focal hemorrhage laterally on the left in the soft tissues that are adjacent to the hyoid bone. Examination of the hyoid bone reveals antemortem fracture of the cornu on the left.

Examination of the right upper extremity reveals scattered roughly circumferentially oriented linear abrasions associated with early contusion measuring between 1/4 and 1-1/4 inches. These begin over the superior aspect of the shoulder approximately 11 inches below the top of the head and 7 inches to the right of the midline. There are scattered fine vertical superficial postmortem linear abrasions that measure up to 1-1/2 inches in length over the posterior aspect of the upper arm. The ventral aspect of the forearm displays scattered rough curvilinear abrasions running obliquely, running downward and medially beginning approximately 25 inches below the top of the head. These measure approximately 2-1/2 inches in length and are surrounded by a fine corona of contusion.

Examination of the left upper extremity reveals prominent vertically oriented linear abrasions over the anterior aspect of the axilla measuring up to 4-1/4 inches in length and beginning approximately 12-1/2 inches below the top of the head and 7 inches to the left of the midline. There are scattered roughly vertically oriented linear abrasions over the distal portion of the upper arm measuring up to 3 inches.

Examination of the thorax reveals scattered contusions over the anterior aspect of the upper shoulder on the right beginning approximately 9-1/2 inches below the top of the head and starting 2-1/2 inches to the right of the midline. This area covers in aggregate an area measuring approximately 4-1/2 x 3 inches with individual lesions measuring between 0.5 and 1.5 cm. In one of these areas, there is a series of punctate lesions in a rough semicircle measuring approximately 2-1/2 inches in diameter. There are scattered geographic abrasions over the anterior aspect of the shoulder and supraclavicular area on the right, measuring up to an inch in greatest dimension. There is prominent drying artifact in a linear pattern extending from the base of the neck in the midline laterally across the upper portion of the brassiere as noted in the remains pouch. Examination of the mid thorax reveals prominent drying artifact and scattered linear abrasions over the anterior thorax oriented primarily vertically and measuring up to 2-1/8 inches in greatest dimension.

Examination of the abdomen is remarkable for the presence of a large number of vertically oriented superficial perimortem linear abrasions with either minimal or no vital reaction that measure up to 12 inches in greatest length. These begin approximately 19 inches below the top of the head. There is scattered dark discoloration associated with a

drying artifact over the upper aspect of the thorax bilaterally but not associated with significant subcutaneous bleeding on cut surface.

Examination of the left lower extremity reveals multiple vertically oriented perimortem and antemortem linear abrasions extending vertically over the lateral aspect of the hip beginning approximately 28 inches below the top of the head and measuring up to 8 inches in length. Examination of the distal portion of the lower extremity reveals a postmortem abrasion over the pretibial area that measures $2-1/2 \times 1/8$ inch beginning approximately 55 inches below the top of the top of the head.

Examination of the right lower extremity reveals prominent skin slippage and postmortem artifact consistent with being found in a right lateral recumbent position at the scene. There is a vertically oriented linear abrasion over the anteromedial aspect of the thigh that measures approximately 4 inches in length and begins approximately 36-3/4 inches below the top of the head. There are sparse linear abrasions over the medial aspect of the distal portion of the lower extremity beginning approximately 52 inches below the top of the head and measuring up to 2-1/2 inches in length.

Examination of the back reveals rare roughly horizontally oriented linear abrasions over the upper back measuring approximately 10-1/2 inches below the top of the head and measuring up to 3 inches in length. There is a vertically oriented postmortem linear abrasion over the sacrum approximately 27 inches below the top of the head that measures approximately 1-1/2 inches in length.

DISPOSITION OF CLOTHING AND PERSONAL EFFECTS

The following items are preserved as evidence

Clothing transferred to Gene Harrell, Edgecombe Co Sheriff's Office (see Special Evidence Collection).

PROCEDURES

Radiographs

Radiographs of the head are compared to dental records. No projectiles or fractures are noted.

Identification

Identification is based on body habitus, tattoos, dental records, age, sex, race, and circumstances. Teeth are charted and radiographs of the head are taken and compared with dental records. Tattoos are photographed.

Special Evidence Collection

The following are collected and transferred to Gene Harrell, Edgecombe Co Sheriff's Office:

- Pulled head hair
- Pulled pubic hair
- Blood standard on filter paper
- Sexual assault evidence collection kit including outer clothing
- Biohazard bag containing hair elastic
- Biohazard bag containing evidence seals

INTERNAL EXAMINATION

Body Cavities

The skin of the chest and abdomen is reflected using the standard Y-shaped incision. The subcutaneous fat and musculature are unremarkable. The subcutaneous fat measures 3 cm over the thorax and 6 cm over the abdomen. The chest is intact. There are approximately 15 cc of serosanguineous fluid in the right pleural space, 30 cc of serosanguineous fluid in the left pleural space, and 20 cc of serosanguineous fluid in the pericardial space. No peculiar odor or color change is identified other than decompositional change. Examination of the organs in situ shows normal organ morphology and relationships. The viscera are not congested. The diaphragm is intact. The thoracic and abdominal organs are removed using the modified Virchow technique and are serially examined.

Cardiovascular System

Heart Weight 281 grams

All four chambers are unremarkable. The coronary arteries are normally distributed with a dominant right coronary artery and are widely patent throughout their lengths. The left ventricular wall measures 1.1 cm, the interventricular

septum measures 0.9 cm, and the right ventricular wall measures 0.3 cm. The epicardium, valve leaflets, chordae, papillary muscles and endocardium appear unremarkable. There is no evidence of dilation, constriction, or prolapse. The foramen ovale is closed, and septal defects are not noted. The myocardium is tan-red and without focal intramyocardial lesion. The thoracoabdominal aorta and major branches are rubbery and thin showing minimal atherosclerotic change.

Respiratory SystemRight Lung Weight577 gramsLeft Lung Weight408 grams

The larynx, trachea and bronchi are lined by an autolyzed mucosa and display trauma as described in "Injuries." The major vessels are normally distributed and are free of gross abnormalities. The lungs appear similar. The lung parenchyma displays diffuse moderate congestion and exudes bloody fluid on manual compression. No distinct areas of consolidation are noted. There is no evidence of thrombosis, embolus, infarction or neoplasia. The epicardial, visceral and parietal pleura are free of injury. Anthracosis is moderate.

Gastrointestinal System

The large and small bowel are normal to gross inspection and palpation. The serosa, wall and mucosa of the esophagus and stomach are grossly normal. Features of bowel obstruction are not noted. The stomach contains approximately 25 cc of cloudy grayish-red fluid without obvious fragments of food. The vermiform appendix is present and is grossly unremarkable.

Liver

Liver Weight 1897 grams

The hepatic capsule is smooth and glistening. The hepatic parenchyma shows mild congestion. There is no evidence of fatty change, cirrhosis or focal intrahepatic lesion. The gallbladder is surgically absent. No stones are noted. The extrahepatic biliary ducts appear to be patent; there is bile staining of the duodenal mucosa.

Spleen

Spleen Weight 110 grams The capsule is intact. The pulp is liquified.

Pancreas

The pancreas shows the usual lobular architecture. No hemorrhage, pancreatic fibrosis, fat necrosis or neoplasm is noted.

Urinary

Right Kidney Weight154 gramsLeft Kidney Weight137 grams

The kidneys are symmetric. The capsules strip with ease and the cortical surfaces are smooth and unremarkable. The corticomedullary ratios and junctions are normal. The pyramids, calyces, pelves and vessels are unremarkable. The ureters are of normal caliber. The urinary bladder displays a 5 cm area of hyperemia and focal hemorrhage and contains minimal urine.

Reproductive

The uterus is grossly unremarkable. The ovaries are grossly unremarkable.

Endocrine

The thyroid gland is of normal size, symmetric, tan-brown and is free of nodularity, hemorrhage or cyst. The parathyroids are not observed. The adrenals are autolyzed but are otherwise unremarkable. The pituitary gland is excised and is grossly unremarkable.

Neurologic

Brain Weight 1103 grams

The dura is intact and is grossly unremarkable. The base of the skull is intact. There is a thin film of subdural blood upon removal of the dura but no subarachnoid hemorrhage. The gyri and sulci are of normal distribution and development. The vessels at the base of the brain are free of aneurysmal dilatation. No contusions are noted. The cerebellum and brainstem are normally formed. The cranial nerves are uniform. No focal or mass lesions are seen on the external or cut brain sections, and the brain is normal to palpation. Removal of the dura from the base of the skull shows the usual anatomic features without abnormalities. The ventricular system and spinal fluid are unremarkable.

Skin

The scalp is reflected with the standard intermastoidal incision. There is no obvious scalp trauma. The calvarium is intact.

Immunologic System

Thymus Weight 21 grams

The thymus is present. The lymph nodes of the hilar, mediastinal, cervical and abdominal areas appear normal. The bone marrow where seen is unremarkable.

Musculoskeletal System

The skeletal muscles are symmetric, well-developed and normal in appearance. Vertebral marrow spaces are grossly unremarkable. The skeletal system is intact. The skin of the neck is dissected to the angle of the mandible. There is trauma as described in "Evidence of Injury". The epiglottis is grossly unremarkable. No foreign objects are in the airways. The anterior cervical spine and atlanto-occipital joints are stable to manipulation.

MICROSCOPIC EXAMINATION

Microscopic Comment

The following sections are taken:

A. Thymus and heart
B. Right lung, right kidney
C. Left lung, left kidney
D. Large bowel, heart
E. Small bowel, heart
F. Heart and adrenal gland
G. Skin from abdomen, heart
H. Liver
I. Soft tissue surrounding hyoid on left, skin of neck on left
J.Skin of neck on right
K. Thyroid, brain
L. Urinary bladder, pituitary, uterus
M. Dura, ovary, spleen, pancreas

Cardiovascular

Sections of the heart reveal no significant pathologic diagnosis.

Respiratory

Sections of the lungs reveal vascular congestion and patchy intra-alveolar hemorrhage. There is decompositional change. Anthracotic pigment is focally prominent. Birefringent debris are not noted within pulmonary tissue.

Liver

It is congested

Hematologic

Section of spleen reveals no significant pathologic diagnosis.

Pancreas

It is autolyzed.

Genitourinary

Section of the kidney is autolyzed. There is early mild subcapsular arteriolonephrosclerotic complex formation. Birefringent crystals are not noted on polarization. Section of uterus reveals no significant pathologic diagnosis. Section of urinary bladder reveals focal acute hemorrhage within the serosa as well as vascular ectasia. Section of ovary reveals no significant pathologic diagnosis.

Endocrine

Section of the adrenal gland reveals nodular cortical hyperplasia. Section of thyroid reveals no significant pathologic diagnosis. Section of pituitary reveals no significant pathologic diagnosis.

Neurologic

Sections of brain reveal no significant pathologic diagnosis. Section of dura reveals no significant pathologic diagnosis.

Skin

Section from abdomen reveals no significant pathologic diagnosis. Section from the left side of the neck reveals no significant pathologic diagnosis. Section from the right side of the neck reveals no significant pathologic diagnosis.

Immunologic

Section of the thymus reveals marked involution. The residual thymic tissue reveals no significant pathologic diagnosis.

Gastrointestinal

Section of small bowel reveals autolysis.

Musculoskeletal

Section from the tissue surrounding the left cornu of the hyoid reveals focal acute hemorrhage.

SUMMARY AND INTERPRETATION

Autopsy examination of this 29-year-old woman identified as Tarah Nicholson was remarkable for the presence of trauma associated with strangulation. This represents the most likely cause of death. In addition, there were numerous linear abrasions consistent with dragging marks. Toxicology screen was positive for cocaine and its metabolite.

DIAGRAMS

1. 1. B09-372diagram.jpg

