

OFFICE OF THE MEDICAL EXAMINER
Center for Forensic Medicine
Nashville, Tennessee

REPORT OF INVESTIGATION BY COUNTY MEDICAL EXAMINER

Davidson County Medical Examiner: Feng Li M.D., J.D., Ph.D.

Judicial District Number: 20

State Number: 19-19-2719

District Attorney: Honorable Glenn Funk

Case Number: MEC19-1293

| | | | | | |
|--|---|---|---------------|-----------------------------|-------------|
| Name of Decedent Donnie Edward Johnson | | Age 68 Years | Race White | Date of Birth 01/15/1951 | Sex Male |
| Address Riverbend Maximum Security Institution, 7475 Cockrill Bend Blvd, Nashville, TN 37209 | | | | | |
| Date of Death 05/16/2019 7:37 PM | Type of Death In Jail/Prison/In Police Custody | Investigating Agency/Complaint #: TN Department of Corrections | | | |
| Place of Death Riverbend Maximum Security Institution, Nashville, TN | | | | | |
| Narrative Summary <p>The decedent was reported to be a 68-year-old, Caucasian male who was an inmate with the Tennessee Department of Correction (TDOC) housed at the Riverbend Maximum Security Institution. On 05/16/2019, his execution was carried out by means of lethal injection as ordered by the State of Tennessee. His death was pronounced by a physician at 1937 hours. Due to the fact that the decedent was incarcerated at the time of his death and based on the unnatural circumstances, Medical Examiner jurisdiction was accepted. Director of Investigations Candice Sexton and Investigator Kelli Derleth responded to the scene. A brief body examination was conducted and was documented through photography. The decedent was then transported via Middle Tennessee Removal Service to the Center for Forensic Medicine for further examination and death certification purposes.</p> <p>Investigator Kelli Derleth 05/16/2019 2141 hours</p> | | | | | |
| Jurisdiction Accepted Yes | Autopsy Ordered Yes | Toxicology Ordered Yes | | | |
| Physician Responsible for Death Certificate Erin M Carney, M.D. | | | | | |
| Cremation Approved Yes | Funeral Home Tennessee Cremation Care | | | | |
| Cause of Death Acute combined drug intoxication due to Lethal injection | | | | | |
| Contributory Cause of Death | | | | | |
| Manner of Death Homicide | | | | | |

CERTIFIED COPY
 Date: 5/16/2019
 Certified by: [Signature]
 Forensic Medical - Office of the
 Medical Examiner, Nashville, TN

OFFICE OF THE MEDICAL EXAMINER
Center for Forensic Medicine
850 R.S. Gass Blvd.
Nashville, Tennessee 37216-2640

CASE: MEC19-1293
County: DAVIDSON

AUTOPSY REPORT

NAME OF DECEDENT: JOHNSON, DONNIE RACE: White SEX: Male AGE: 68
DATE AND TIME OF DEATH: May 16, 2019 at 7:37 p.m.
DATE AND TIME OF AUTOPSY: May 17, 2019 at 9:15 a.m.
FORENSIC PATHOLOGIST: Erin M. Carney, M.D.
COUNTY MEDICAL EXAMINER: Feng Li, M.D., J.D., Ph.D.
DISTRICT ATTORNEY GENERAL: Honorable Glenn Funk

PATHOLOGIC DIAGNOSES

1. Acute combined drug intoxication:
 - A. Drugs administered by lethal injection.
 2. Hypertensive atherosclerotic cardiovascular disease:
 - A. Cardiomegaly (530 grams) with clinical history of hypertension.
 - B. Thirty to sixty percent calcific stenosis, left anterior descending artery.
 - C. Seventy-five percent calcific stenosis, branch of left circumflex artery.
 - D. Calcification of right coronary artery without stenosis.
 - E. Nephrosclerosis.
 - F. Remote infarcts, brain.
 3. Pulmonary congestion and edema (right lung 830 grams, left lung 800 grams with frothy fluid of lower airways).
 4. Remote left-sided rib fractures.
-

CAUSE OF DEATH: Acute combined drug intoxication due to lethal injection

MANNER OF DEATH: Homicide

CIRCUMSTANCES OF DEATH: Judicial execution

I hereby certify that I, Erin M. Carney, M.D. have performed an autopsy on the body of Donnie Johnson on the 17th day of May, 2019 at 9:15 a.m. in the Center for Forensic Medicine. The purpose of this report is to provide a certified opinion to the County Medical Examiner and District Attorney General. The facts and findings to support these conclusions are filed with the Tennessee Department of Health. The autopsy was performed in the presence of David Zimmerman, M.D.

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished (body mass index of 38.9 kilograms per meter squared), white male clad in pale yellow shirt and pants, white shirt, white undershorts, and white socks. The body weighs 287 pounds, is 6 feet in length, and appears consistent with the reported age of 68 years. Rigor is present to an equal degree in all extremities. Blanching lividity is on the posterior surface of the body, except in areas exposed to pressure. The scalp hair is white mixed with brown. Facial hair consists of short hair in a mustache and beard distribution. The irides are blue. The corneas are hazy. The conjunctivae are pale and without petechial hemorrhages. Mid-scleral drying is noted. The external auditory canals, nares, and oral cavity are free of foreign material and abnormal secretions. The jaws are edentulous, with maxillary and mandibular dentures. The neck is without deformity or palpable masses. The chest exhibits the normal anteroposterior diameter. The abdomen is soft. The extremities are symmetric and without deformity. The fingernails are long, clean, and intact. Neither tattoos nor needle tracks are observed. Scars are on the left forearm, right side of the lower abdomen, left knee, and right leg. Crusted abrasions are on the legs. A 1 3/4 x 1 inch firm, mobile mass is on the upper back. The external genitalia are those of an adult male. The penis is uncircumcised and both testes are descended within the scrotum. The posterior torso exhibits a normal contour, and the anus is unremarkable.

EVIDENCE OF THERAPY: Intravenous catheters are in the antecubital fossae with attached intravenous saline bags.

EVIDENCE OF INJURY: Abrasions are on the right forearm and lower back over the sacrum. A faint purple contusion is on the medial left knee.

INTERNAL EXAMINATION

BODY CAVITIES: The body is opened by the usual thoraco-abdominal incision and the chest plate is removed. No adhesions or abnormal collections of fluid are in the pleural, pericardial, or abdominal cavities. All body organs are in the normal anatomic position.

HEAD: The scalp is reflected. The calvarium of the skull is removed. The dura mater and falx cerebri are intact. There is no epidural, subdural, or subarachnoid hemorrhage. The leptomeninges are thin and delicate. The cerebral hemispheres are symmetrical. The structures at the base of the brain, including cranial nerves and blood vessels, are intact. There is no evidence of herniation. Coronal sections through the cerebral hemispheres reveal yellow-brown cystic lesions in the white matter of the right frontal (0.4 x 0.3 cm), left frontal (0.7 x 1 cm), left frontoparietal (0.4x 0.3 cm), and left parietal (0.6 x 0.5 cm) lobes. Transverse sections through the brain stem and cerebellum are unremarkable. The brain weighs 1450 grams.

NECK: Examination of the soft tissues of the neck, including strap muscles and large vessels, reveal no abnormalities. The larynx and trachea are normally formed and patent with unremarkable mucosa. The hyoid bone and thyroid cartilage are intact. The cervical spine is unremarkable.

CARDIOVASCULAR SYSTEM: The pericardial surfaces are smooth, glistening, and unremarkable. The coronary arteries arise normally and follow the usual distribution with right dominant circulation. The coronary arteries show significant atherosclerosis with 30-60% calcific stenosis of the proximal left anterior descending artery, 75% calcific stenosis of an inferior branch of the left circumflex artery, and calcification without significant stenosis of the right coronary artery. The chambers and valves exhibit the usual size-position relationship, with calcifications of the sinoatrial ridge and non-coronary cusp of the aortic valve. The myocardium is red-brown, soft, and unremarkable; the atrial and ventricular septa are intact. The thickness of the heart walls as measured 1 cm below the atrioventricular valve annuli are as follows: right ventricle, 0.3 cm; left ventricle, 1.4 cm; and interventricular septum, 1.5 cm. The aorta and its major branches arise normally, follow the usual course and are widely patent, free of significant atherosclerosis and other abnormality. The vena cava and its major tributaries return to the heart in the usual distribution and are free of thrombi. The heart weighs 530 grams.

RESPIRATORY SYSTEM: The bronchi and bronchioles contain frothy fluid that extends up to the carina; the mucosal surfaces are otherwise smooth, yellow-tan, and unremarkable. The pleural surfaces are smooth, glistening, and intact. The lungs exhibit normal lobar configurations. The pulmonary parenchyma is pink to red, exuding slight to moderate amounts of bloody fluid; no focal lesions are noted. The pulmonary arteries are normally developed and patent, without thrombus or embolus. The right lung weighs 830 grams, and the left lung weighs 800 grams.

HEPATOBIILIARY SYSTEM: The hepatic capsule is smooth, glistening, and intact, covering dark red-brown parenchyma with no focal lesions noted. The gallbladder contains yellow-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi. The liver weighs 1810 grams.

ALIMENTARY TRACT: The tongue exhibits no evidence of recent injury. The esophagus is lined by a gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds, exhibits a white reticular pattern in the distal fundus and antrum, and the lumen contains 430 mL of tan watery fluid. The small and large intestines are unremarkable. The pancreas has a normal pink-tan lobulated appearance and the ducts are not dilated. The appendix is unremarkable.

GENITOURINARY SYSTEM: The renal capsules are smooth and thin, semi-transparent, and stripped with ease from the underlying granular, red-brown cortical surfaces. A 0.5 x 0.4 x 0.2 cm yellow lesion is on the cortex of the right kidney. A 1.5 x 1.3 x 1.2 cm cortical cyst is in the left kidney. The cortices are sharply delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelves, and ureters are unremarkable. The right kidney weighs 250 grams; the left kidney 300 grams. The urinary bladder contains 180 mL of clear yellow urine; the mucosa is gray-tan and smooth. The prostate gland is nodular. The seminal vesicles are unremarkable, and the testes are congested.

RETICULOENDOTHELIAL SYSTEM: The spleen has a smooth, intact capsule covering a red-purple, soft parenchyma; the lymphoid follicles are unremarkable. The regional lymph nodes appear normal. The spleen weighs 310 grams.

ENDOCRINE SYSTEM: The left lobe of the thyroid gland is enlarged compared to the right lobe, with yellow to red-purple mottling of the parenchyma. The parathyroid glands are inconspicuous. The adrenal glands and pituitary gland are unremarkable.

MUSCULOSKELETAL SYSTEM: Muscle development is normal. Remote fractures of the lateral aspect of left ribs 6 and 7 are identified. No other bone or joint abnormalities are noted.

TOXICOLOGY: Blood, urine, and vitreous fluid are submitted for toxicologic analysis (see separate report).

HISTOLOGY: Three (3) tissue cassettes are submitted.

- **YELLOW CORTICAL LESION, KIDNEY (A):** A section of the yellow cortical lesion of the kidney reveals a mass consisting of clusters of cells with pink granular cytoplasm and clear, bubbly cytoplasm with occasional nucleoli. The adjacent kidney shows a few sclerotic glomeruli, intratubular calcifications, and single focus of interstitial chronic inflammation.
- **LEFT LOBE, THYROID GLAND (B):** A section of the left lobe of the thyroid gland reveals follicular architecture with areas of hyalinized stroma and dystrophic calcification. No tumor is identified.
- **ANTRUM (C):** A section of the antrum reveals absence of normal mucosa (possible autolysis and sloughing) with a dense infiltrate of small blue cells with dispersed chromatin and rare nucleoli in the submucosa and pink, amorphous material. The muscle appears unaffected.

ADDITIONAL STUDIES: A full body postmortem radiograph reveals surgical hardware in the left forearm. No projectiles or acute fractures are noted.

SUMMARY OF CASE & OPINION

This 68-year-old white male, Donnie Johnson, was an inmate at Riverbend Maximum Security Institution. His judicial execution was carried out on May 16, 2018 by lethal injection. His past medical history is significant for hypertension, hyperlipidemia, and diabetes mellitus with a documented stroke in 2016.

Autopsy examination reveals remote infarcts of the brain, an enlarged heart with moderate to severe atherosclerosis of the coronary arteries, pulmonary congestion and edema with frothy fluid in the lower airways, a renal cortical cyst, and old left-sided rib fractures. A mass in the kidney appears to be adrenal cortex. Additional incidental findings are in the thyroid gland and stomach that do not contribute to death. Postmortem toxicology testing of the blood reveals a high level of midazolam with glipizide.

The cause of death is acute combined drug intoxication due to lethal injection. As the death is a result of judicial execution, the manner of death is classified as homicide.

*****Electronically signed by Erin M. Carney, M.D. on Monday, July 1, 2019*****

Erin M. Carney, M.D.
Assistant Medical Examiner



NMS Labs

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Robert A. Middleberg, PhD, F-ABFT, DABCC-TC, Laboratory Director

Toxicology Report

Report Issued 06/05/2019 10:04

Patient Name JOHNSON, DONNIE
Patient ID MEC# 19-1293
Chain 19150044
Age Not Given DOB Not Given
Gender Not Given
Workorder 19150044

To: 10341
Forensic Medical Management Services - Nashville
850 R.S. Gass Blvd.

Nashville, TN 37216

Page 1 of 4

Positive Findings:

Table with 4 columns: Compound, Result, Units, Matrix Source. Rows include Midazolam (930 ng/mL) and Glipizide (360 ng/mL) from femoral blood.

See Detailed Findings section for additional information

Testing Requested:

Table with 2 columns: Analysis Code, Description. Row 8042B: Postmortem, Expanded w/Vitreous Alcohol Confirmation, Blood (Forensic)

Specimens Received:

Table with 5 columns: ID, Tube/Container, Volume/Mass, Collection Date/Time, Matrix Source, Miscellaneous Information. Lists 4 specimens including Gray Top Tubes, Red Top Tube, and White Plastic Container.

All sample volumes/weights are approximations.

Specimens received on 05/21/2019.



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Workorder 19150044
Chain 19150044
Patient ID MEC# 19-1293

Page 2 of 4

Detailed Findings:

| Analysis and Comments | Result | Units | Rpt. Limit | Specimen Source | Analysis By |
|-----------------------|--------|-------|------------|---------------------|-------------|
| Midazolam | 930 | ng/mL | 5.0 | 001 - Femoral Blood | LC-MS/MS |
| Glipizide | 360 | ng/mL | 40 | 001 - Femoral Blood | LC-MS/MS |

Other than the above findings, examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Reference Comments:

1. Glipizide (Glibenese; Glucotrol®; Glynase) - Femoral Blood:

Glipizide is a second-generation oral sulfonylurea anti-diabetic agent that lowers blood glucose in both diabetics and non-diabetics. It is available in both normal release and extended release formulations.

Peak plasma concentrations of approximately 310 - 610 ng/mL were achieved after administration of a single 5 mg dose of both immediate and extended release formulations. Maximum concentrations were reached in approximately 1.5 - 4.5 and 3.5 - 7 hours after immediate and extended release dosing, respectively.

Oral ingestion of a single 5 mg tablet can result in persistent hypoglycemia in children. A serum glipizide concentration of 400 ng/mL was measured in a 5 year old child administered 15 mg/day for 3 days. A 6 year old child who ingested a 10 mg extended release tablet remained hypoglycemic for 70 hours with a serum glipizide concentration of 1000 ng/mL 57 hours post-ingestion.

Adverse effects of glipizide are similar to effects associated with hypoglycemia including dizziness, drowsiness, headache, nausea and diarrhea.

The blood to plasma ratio of Glipizide is not known.

2. Midazolam (Versed®) - Femoral Blood:

Midazolam is a short acting benzodiazepine (a DEA Schedule IV controlled compound) with strong central nervous system depressant/hypnotic properties. It is usually utilized for preoperative sedation, as a sedative hypnotic, and as an agent for the induction of anesthesia. It has significant abuse potential. Effects noted following use may include sedation, somnolence (drowsiness or sleepiness), visual disturbances (diplopia or double vision), dysarthria (slurred speech), ataxia (shaky movements and unsteady gait), and intellectual impairment and coma may result.

Oral doses of 10 mg given to 20 subjects produced average peak plasma concentrations (at 1 hr post dose) for midazolam of 69 ng/mL in males and 53 ng/mL in females. As a preoperative medication, intramuscular injection of midazolam at 0.13 mg/Kg body weight (9.1 mg/70 Kg body weight) produced peak plasma concentrations of 68 ng/mL.

At high concentrations, confusion, impaired coordination, diminished reflexes, respiratory depression, apnea, hypotension and coma may result.

Sample Comments:

001 Physician/Pathologist Name: DR. ERIN CARNEY

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded one (1) year from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.



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Workorder 19150044
Chain 19150044
Patient ID MEC# 19-1293

Page 3 of 4

Workorder 19150044 was electronically signed on 06/05/2019 09:30 by:

Donna M. Papsun, M.S., D-ABFT-FT
Forensic Toxicologist

Analysis Summary and Reporting Limits:

All of the following tests were performed for this case. For each test, the compounds listed were included in the scope. The Reporting Limit listed for each compound represents the lowest concentration of the compound that will be reported as being positive. If the compound is listed as None Detected, it is not present above the Reporting Limit. Please refer to the Positive Findings section of the report for those compounds that were identified as being present.

Acode 50012B - Benzodiazepines Confirmation, Blood - Femoral Blood

-Analysis by High Performance Liquid Chromatography/ Tandem Mass Spectrometry (LC-MS/MS) for:

| <u>Compound</u> | <u>Rpt. Limit</u> | <u>Compound</u> | <u>Rpt. Limit</u> |
|-------------------------|-------------------|------------------------|-------------------|
| 7-Amino Clonazepam | 5.0 ng/mL | Flurazepam | 2.0 ng/mL |
| Alpha-Hydroxyalprazolam | 5.0 ng/mL | Hydroxyethylflurazepam | 5.0 ng/mL |
| Alprazolam | 5.0 ng/mL | Hydroxytriazolam | 5.0 ng/mL |
| Chlordiazepoxide | 20 ng/mL | Lorazepam | 5.0 ng/mL |
| Clobazam | 20 ng/mL | Midazolam | 5.0 ng/mL |
| Clonazepam | 2.0 ng/mL | Nordiazepam | 20 ng/mL |
| Desalkylflurazepam | 5.0 ng/mL | Oxazepam | 20 ng/mL |
| Diazepam | 20 ng/mL | Temazepam | 20 ng/mL |
| Estazolam | 5.0 ng/mL | Triazolam | 2.0 ng/mL |

Acode 52405B - Hypoglycemics Confirmation, Blood - Femoral Blood

-Analysis by High Performance Liquid Chromatography/ Tandem Mass Spectrometry (LC-MS/MS) for:

| <u>Compound</u> | <u>Rpt. Limit</u> | <u>Compound</u> | <u>Rpt. Limit</u> |
|-----------------|-------------------|-----------------|-------------------|
| Glipizide | 40 ng/mL | Glyburide | 40 ng/mL |

Acode 8042B - Postmortem, Expanded w/Vitreous Alcohol Confirmation, Blood (Forensic) - Femoral Blood

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

| <u>Compound</u> | <u>Rpt. Limit</u> | <u>Compound</u> | <u>Rpt. Limit</u> |
|-----------------|-------------------|-----------------|-------------------|
| Barbiturates | 0.040 mcg/mL | Salicylates | 120 mcg/mL |
| Cannabinoids | 10 ng/mL | | |

-Analysis by Headspace Gas Chromatography (GC) for:

| <u>Compound</u> | <u>Rpt. Limit</u> | <u>Compound</u> | <u>Rpt. Limit</u> |
|-----------------|-------------------|-----------------|-------------------|
| Acetone | 5.0 mg/dL | Isopropanol | 5.0 mg/dL |
| Ethanol | 10 mg/dL | Methanol | 5.0 mg/dL |



CONFIDENTIAL

Workorder 19150044
Chain 19150044
Patient ID MEC# 19-1293

Page 4 of 4

Analysis Summary and Reporting Limits:

-Analysis by High Performance Liquid Chromatography/Time of Flight-Mass Spectrometry (LC/TOF-MS) for: The following is a general list of compound classes included in this screen. The detection of any specific analyte is concentration-dependent. Note, not all known analytes in each specified compound class are included. Some specific analytes outside these classes are also included. For a detailed list of all analytes and reporting limits, please contact NMS Labs.

Amphetamines, Anticonvulsants, Antidepressants, Antihistamines, Antipsychotic Agents, Benzodiazepines, CNS Stimulants, Cocaine and Metabolites, Hallucinogens, Hypnotics, Hypoglycemics, Muscle Relaxants, Non-Steroidal Anti-Inflammatory Agents, Opiates and Opioids.