BOARD OF MEDICOLEGAL INVESTIGATIONS

OFFICE OF THE CHIEF MEDICAL EXAMINER

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By _____

Date _____

REPORT OF INVESTIGATION BY MEDICAL EXAMINER

DECEDENT First-Middle-Last Names (Please avoid use of initials)	Age	Birth Date	Race	Sex
ZACHARY ALEXANDER YOUNG	27	10/15/1993	WHITE	M

HOME ADDRESS - No. - Street, City, State
1223 W C AVE., ELK CITY, OK

EXAMINER NOTIFIED BY - NAME - TITLE (AGENCY, INSTITUTION, OR ADDRESS)				DATE	TIME
DETECTIVE SAM WEYGAND / ELK CITY POLICE DEPARTMENT				2/5/2021	20:45
INJURED OR BECAME ILL AT (ADDRESS)	CITY	COUNTY	TYPE OF PREMISES	DATE	TIME
1223 W C AVE.	ELK CITY	BECKHAM	RESIDENCE	2/5/2021	Unknown
LOCATION OF DEATH	CITY	COUNTY	TYPE OF PREMISES	DATE	TIME
1223 W C AVE.	ELK CITY	BECKHAM	RESIDENCE	2/5/2021	19:25 FOUND
BODY VIEWED BY MEDICAL EXAMINER	CITY	COUNTY	TYPE OF PREMISES	DATE	TIME
921 NE 23RD	OKLAHOMA CITY	OKLAHOMA	AUTOPSY LAB	2/7/2021	10:30

TRANSPORTATION INJURY ☐ DRIVER ☐ PASSENGER ☐ PEDESTRIAN

TYPE OF VEHICLE: ☐ AUTOMOBILE ☐ LIGHT TRUCK ☐ HEAVY TRUCK ☐ BICYCLE ☐ MOTORCYCLE ☐ OTHER: _____

DESCRIPTION OF BODY

EXTERNAL PHYSICAL EXAMINATION

RIGOR: Jaw ☑ Complete ☑; Neck ☑ Absent ☐; Arms ☑ Passing ☐; Legs ☑ Passed ☐; Decomposed ☐

LIVOR: Color RED-PURPLE; Lateral ☑; Posterior ☑; Anterior ☐; Regional _____

EXTERNAL OBSERVATION: Beard _____ Hair LT BROWN; Eyes: Color BLUE-GREE Mustache _____; Opacities _____; Pupils: R 0.5 CM L 0.5 CM; Body Length 70 " Body Weight 233 LBS.

	NOSE	MOUTH	EARS
BLOOD	☐	☐	☐
OTHER	☑	☑	☐

Significant observations and injury documentations - (Please use space below)

I. Natural disease processes:
   A. Single vessel atherosclerotic coronary artery disease, focally severe:
      1. Up to 90% occlusion of the left anterior coronary artery
   B. Heart with left ventricle hypertrophy (left ventricle wall thickness = 1.7 cm)
   C. Obesity (BMI: 33.4 kg/m2)
   D. Fatty liver disease
   E. Cholelithiasis (gallstones)
II. Early internal decomposition changes
III. No fatal trauma
IV. Toxicology detected the decedent's prescription drug medications present in the femoral and heart blood; see separate toxicology report

Probable Cause of Death:

SEVERE ATHEROSCLEROTIC CORONARY ARTERY DISEASE

Other significant conditions contributing to death (but not resulting in the underlying cause given)

OBESITY

Manner of Death:

Natural ☑ Accident ☐
Suicide ☐ Homicide ☐
Unknown ☐ Pending ☐
Not Assigned ☐

Case disposition:

Autopsy YES
Authorized by CELIA COBB M.D.
Pathologist CELIA COBB M.D.
Not a medical examiner case ☐

MEDICAL EXAMINER:

Name, and Address:

CELIA COBB M.D.
921 NE 23rd St.
Oklahoma City, OK 73105

I hereby state that, after receiving notice of the death described herein, I conducted an investigation as to the cause and manner of death, as required by law, and that the facts contained herein regarding such death are true and correct to the best of my knowledge.

Signature of Medical Examiner CELIA COBB M.D.

Computer generated report

2/5/2021
Date Case Initiated

7/22/2021
Date Case Finalize

CME-1 (REV 7-19)

Board of Medicolegal Investigations
Office of the Chief Medical Examiner
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CERTIFICATION
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By_____

Date_____

REPORT OF AUTOPSY

Decedent	Age	Birth Date	Race	Sex	Case No
ZACHARY ALEXANDER YOUNG	**27**	**10/15/1993**	**WH**	**M**	**2100818**

ID By
VISUAL

Authority for Autopsy
CELIA COBB, M.D.

Present at Autopsy
CELIA COBB, M.D.; QUEISHA ODEN; ASMA SHARIF, M.D.

Reviewed by
ASMA SHARIF, M.D.

FINDINGS

I. Natural disease processes:
   A. Single vessel atherosclerotic coronary artery disease, focally severe:
      1. Up to 90% occlusion of the left anterior coronary artery
   B. Heart with left ventricle hypertrophy (left ventricle wall thickness = 1.7 cm)
   C. Obesity (BMI: 33.4 kg/m^2)
   D. Fatty liver disease
   E. Cholelithiasis (gallstones)

II. Early internal decomposition changes

III. No fatal trauma

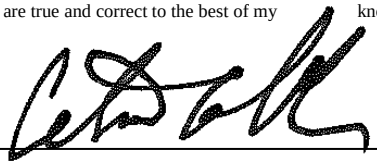
IV. Toxicology detected the decedent's prescription drug medications present in the femoral and heart blood; see separate toxicology report

CAUSE OF DEATH: **SEVERE ATHEROSCLEROTIC CORONARY ARTERY DISEASE**

OSC: **OBESITY**

MANNER OF DEATH: **NATURAL**

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



OCME Central Division 2/7/2021 10:30 AM

CELIA COBB, M.D. Pathologist Location of Autopsy Date and Time of Autopsy

CASE SUMMARY

In my opinion, based on the circumstances surrounding death and the findings at autopsy, Zachary Alexander Young died as a result of severe atherosclerotic coronary artery disease. Other significant conditions contributing to his death include obesity.

The manner of death is natural.

The opinion as the cause and manner of death is based on the information available at the date of this report. If additional objective, probative information becomes available, I reserve the right to consider such information, and if appropriate, amend the report, including the cause and manner of death.

MEDICOLEGAL INVESTIGATION

Circumstances of Death: According to investigator reports, the decedent was a 27-year-old male with a reported medical history of bipolar disorder and a recent shoulder dislocation who reportedly had not been feeling well and had been vomiting for a day or two before his death. His prescription medications reportedly include clonazepam, quetiapine, sertraline and medical marijuana.

Identification: The body is identified through visual recognition via his grandfather, Douglas Bounds. Fingerprints and blood samples on filter paper are retained.

POSTMORTEM EXAMINATION

Circumstances of Examination: The postmortem examination of Zachary Young is performed at the Office of the Chief Medical Examiner, Central Division, Oklahoma City, Oklahoma, on 02/07/2021 commencing at 1030 hours. Assisting in the examination are Dr. Asma Sharif and autopsy technician Queisha Oden.

Clothing and Personal Effects: The body is received clad in vomit-stained red shorts and black socks with an orange ID band on the left ankle. No personal effects accompany the body.

EVIDENCE OF MEDICAL INTERVENTION

There is no evidence of emergency medical intervention.

EXTERNAL EXAMINATION

Length: 70 inches
Body weight: 233 pounds
Body mass index (BMI): 33.4 kg/m²

Algor: cool
Rigor: complete in the jaw, neck, arms and legs
Livor: red-purple, posterior, blanching with moderate pressure

The body is that of a well-developed, slightly obese male appearing consistent with the reported age of 27 years. The body is refrigerated and not embalmed. The skin is dry and elastic with noted congestion of the head, neck, and upper torso.

The head is atraumatic. The scalp hair is somewhat curly, short, light brown, and in a normal distribution. The face is clean shaven. The eyes have blue-green irides, and the pupils are equal and round (0.5 cm). The conjunctivae are congested and without petechiae. The sclerae are white. Dark red-brown purge fluid admixed with yellow-brown vomitus are present within the external nares and mouth. The teeth are natural and are in fair condition. The lips and oral mucosa are intact. The frenula are intact. The patent ear canals contain no blood or fluid.

The neck and thorax are symmetric. The abdomen is soft and round. The back, pelvis and anogenital region are intact. The external genitalia are those of an adult male. The upper and lower extremities are symmetric and normally formed. The arms have no track marks. The fingernails are intact.

A few minor contusions are identified on the body; they include an ovoid yellow contusion on the right upper chest (3 x 3 cm); a slightly irregular, yellow and red-brown contusion on the right anterolateral abdomen; a round, blue contusion on the posterior right forearm (1.5 x 1.5 cm); and an ovoid, red-brown contusion on the left forehead (~1 x 0.6 cm). The only conspicuous scar noted is a hyperpigmented, curvilinear scar on the right temple (2.5 cm long). Tattoos are not identified. No external fatal trauma is present.

INTERNAL EXAMINATION

The body is opened through the customary "Y" shaped thoracoabdominal incision and the sternum is removed in the usual fashion. The organs of the chest, abdomen, and pelvis are in their normal anatomic positions and are notable for early putrefactive decomposition changes characterized by tissue softening, dusky discoloration, minimal gaseous accumulation, and a putrid odor. The diaphragm is normally formed and intact. The pericardial, pleural, and peritoneal cavities each contain minimal free serous fluid and no abnormal effusions or adhesions. No internal trauma is identified.

NECK

The subcutaneous fat and anterior strap muscles show no evidence of trauma. The cervical vertebrae, hyoid bone, laryngotracheal cartilages, and paratracheal soft tissues are free of injury.

CARDIOVASCULAR SYSTEM

Heart weight: 424 grams

The epicardium is smooth, glistening, and intact. The coronary ostia are normally located. The coronary arteries distribute normally and show focal severe occlusion (~90%) of the proximal left anterior descending coronary artery by a soft, white-yellow, atheromatous plaque. The atrial and ventricular chambers are normally configured. The valves are normally formed and absent of lesions. The myocardium is mottled dusky red brown, no areas of hemorrhage or remote infarctions are identified. The left ventricle, interventricular septum, and right ventricle measure 1.7 cm, 1.9 cm, and 0.3 cm in thickness, respectively. The endocardium is smooth and transparent. The aorta and vena cava are intact and widely patent.

RESPIRATORY SYSTEM

Right lung weight: 859 grams

Left lung weight: 775 grams

The upper and lower airways are widely patent and lined by a smooth, glistening mucosa. The pulmonary arterial tree is free of emboli or thrombi. Pleural surfaces are smooth, glistening, and intact. The congested pulmonary parenchyma exudes copious amounts of dark, red-purple fluid. No areas of discrete consolidation or focal lesions are identified.

CENTRAL NERVOUS SYSTEM

Brain weight: 1631 grams

The scalp is opened through the customary intermastoid incision and shows no trauma. The calvaria is removed through the use of an oscillating saw, is intact and without evidence of osseous disease. The leptomeninges are thin and transparent. Dural sinuses are patent. The cerebral vessels at the base of the brain distribute normally and show no significant pathology. Externally the brain is normally configured and symmetric. Multiple sections of cerebrum, brainstem, and cerebellum show no gross pathologic change. The ventricular system is symmetric and unremarkable. The base of the skull is intact. The foramen magnum and visualized portions of the upper cervical spinal cord and canal are unremarkable.

GASTROINTESTINAL SYSTEM

The tongue is intact, normally papillated, and without evidence of tumor or hemorrhage. The esophagus is filled with tan-brown stomach contents and shows no gross pathology. The stomach is lined by an intact mucosa and contains approximately 200 ml of tan-brown viscous fluid. There is no evidence of pill residue. The small and large intestines are dusky, but otherwise unremarkable. The appendix is present.

HEPATOBILIARY AND PANCREAS

Liver weight: 2189 grams

The liver capsule is intact with a sharp anterior margin. The parenchyma is dusky red-brown and free of focal lesions or fibrosis. The gallbladder contains liquid bile and a single, 1 cm-diameter, yellow-green gallstone within the fundus. The extrahepatic biliary tree is patent with no evidence of neoplasm or calculi. The pancreas is normally configured and characteristically lobulated.

URINARY SYSTEM

Right kidney weight: 167 grams

Left kidney weight: 164 grams

The capsules strip with ease and the subcapsular surfaces are smooth. The renal architecture is normally configured. The ureters and blood vessels are intact and patent. The urinary bladder contains approximately 200 ml of clear pale-yellow urine. The urothelial surface is free of focal lesions.

REPRODUCTIVE SYSTEM

The prostate is grossly normal. The testes are bilaterally present in the scrotum and show no evidence of tumor, trauma, or inflammation.

ENDOCRINE SYSTEM

The thyroid gland is of normal size, shape, and consistency. The adrenal glands are grossly normal. The pituitary gland is normally positioned within the sella turcica and shows no evidence of tumor or hemorrhage.

IMMUNOLOGIC SYSTEM

Spleen weight: 244 grams

The capsule is smooth and intact. The splenic parenchyma is soft and dark maroon-purple. There is no gross lymphadenopathy. No significant thymic tissue is identified.

INTEGUMENT

Except as noted, the skin shows no significant gross pathology. The subcutaneous fat is normally distributed, moist, and bright yellow.

MUSCULOSKELETAL SYSTEM

The musculature throughout the chest and abdomen is rubbery, dusky red-brown, and shows no gross abnormalities. The skull, axial, and appendicular skeleton appear intact and unremarkable by palpation and by visual examination where possible. The bone marrow is moist and dark red.

ANCILLARY STUDIES

Toxicology: Postmortem specimens are submitted for toxicologic analysis. See separate attached toxicology report.

Histology: Representative tissue sections are stored in formalin. Representative tissue sections are submitted for microscopic examination. See the microscopic examination below.

Photography: Digital photographs of the examination are retained.

Radiology: Full body x-ray is performed.

Other studies: A screening study for COVID-19 (SARS-CoV-2) is negative.

MICROSCOPIC EXAMINATION (H&E)

1. Heart: posterior and anterior left ventricle wall
2. Liver, occluded left anterior descending coronary artery
3. Bilateral kidneys
4. Bilateral lungs

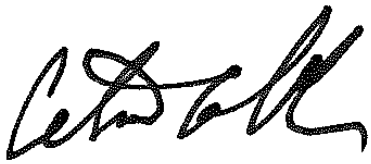
Microscopic evaluation of the submitted tissue sections is somewhat limited by autolysis and postmortem bacterial overgrowth, however, notable findings include the following:

The left anterior descending coronary artery cross sections show severe luminal occlusion (~90%) by a large, chronically inflamed, partially fibrosed, and non-ruptured atheromatous plaque within the intimal wall. The adventitia displays a mild, focal, acute and chronic inflammatory infiltrate.

The left ventricle of the heart shows mild cardiomyocyte hypertrophy. The kidneys appear to be within normal limits. No definitive birefringent polarizable material is identified when the sections are viewed under polarized light.

The liver displays subtle, mostly microvesicular steatosis within approximately 1/3 of hepatocytes. Occasional hepatic vessels are observed to be distended by circulating neutrophils, but intraparenchymal inflammation is not increased. No fibrosis is identified.

The bilateral lungs likewise display occasionally increased circulating neutrophils within the pulmonary vasculature, but intraparenchymal inflammation is not identified. The alveolar walls are thin and absent of fibrosis. Rare clusters of brown pigment-laden histiocytes are observed and are noted to contain rare, birefringent polarizable foreign material. Postmortem decomposition limits further microscopic interpretation.



CELIA COBB, M.D.

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OFFICE OF THE CHIEF MEDICAL EXAMINER

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REPORT OF LABORATORY ANALYSIS

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By _____

Date _____

ME CASE NUMBER: 2100818

LABORATORY NUMBER: 210683

DECEDENT'S NAME: ZACHARY ALEXANDER YOUNG

DATE RECEIVED: 2/8/2021

MATERIAL SUBMITTED: BLOOD, VITREOUS, URINE, LIVER, BRAIN, GASTRIC

HOLD STATUS: 60 DAYS

SUBMITTED BY: QUEISHA ODEN

MEDICAL EXAMINER: CELIA COBB M.D.

NOTES:

ETHYL ALCOHOL:

Blood: 0.05 g/dL - (Heart)

Vitreous: NEGATIVE

Other:

CARBON MONOXIDE

Blood:

TESTS PERFORMED:

ALKALINE DRUG SCREEN - (Heart Blood) and (Femoral Blood)
BENZODIAZEPINES BY LCMS - (Heart Blood)
EIA - (Heart Blood) - Amphetamine, Methamphetamine, Fentanyl, Cocaine, Opiates, PCP, Barbiturates, Benzodiazepines
(The EIA panel does not detect Oxycodone, Methadone, or Clonazepam)

RESULTS:

SERTRALINE
0.34 mcg/g - (Femoral Blood)

MITRAGYNINE
300 ng/mL - (Femoral Blood) - (Performed by NMS)

DIPHENHYDRAMINE
POSITIVE - (Femoral Blood)

The following were Positive; 7-AMINOCLONAZEPAM and DELORAZEPAM - (Heart Blood)

O-DESMETHYLTRAMADOL - Tentative Identification by Mass Spectrum - (Femoral Blood)

Jesse M. Kemp PhD

05/03/2021
DATE

JESSE KEMP, Ph.D., D-ABFT-FT, Chief Forensic Toxicologist