

MEDICAL EXAMINER REPORT

DECEDENT: Jakob A. Blodgett

CASE: 22-13205

DATE OF EXAMINATION: 12/28/2022

TIME: 0855 Hours

CAUSE OF DEATH: Complications of diabetes mellitus

CONTRIBUTORY CAUSE OF DEATH:

Diabetic ketoacidosis

MANNER OF DEATH: Natural

03/27/2023

Date Signed

MD

CAROLINE L. CROSS, MD MEDICAL EXAMINER

FINDINGS

- I. Complications of diabetes mellitus.
 - A. Clinical history of diabetic ketoacidosis.
 - B. Hospital imaging showed cerebral edema.
 - C. Hospital course complicated by diabetes insipidus and cerebral herniation.
 - D. Marked cerebral edema and brainstem Duret hemorrhages.
 - E. Toxicologic analysis detected acetone, isopropanol and betahydroxybutyrate.
 - F. Clinical history of diabetes mellitus type 1.
- II. Evidence of organ procurement.
- III. No evidence of significant trauma or intoxication.

SUMMARY AND OPINION

The decedent is a 9-year-old male who presented to the hospital with altered mental status and vomiting from a group home on December 21, 2022. He was diagnosed with diabetic ketoacidosis and head imaging showed cerebral edema. Glucose upon admission was 330 md/dL. Hospital course was complicated by diabetes insipidus and brain herniation. Death was pronounced on December 26, 2022. Medical history includes poorly controlled diabetes mellitus type 1. According to records, the decedent was recently placed in a Department of Child Safety (DCS) group home on December 9, 2022, due to incarceration of his father. He was hospitalized from December 9-15, 2022, for diabetic ketoacidosis. Following discharge, DCS records state the decedent "sneaks food and candy" and is "resistant" to glucose monitoring and insulin therapy. The decedent reportedly refused his Lantus dose on the night of December 19, 2022. The following morning, his blood glucose was elevated. The group home received medication administration instructions from his physician at that time. The next morning, the decedent complained of headache and somnolence and was transported to the hospital. There were no suspicious circumstances of signs of foul play.

Postmortem examination reveals no evidence of trauma. Toxicologic analysis detected ketone bodies consistent with ketoacidosis and elevated vitreous urea nitrogen.

Based on the autopsy findings and all other investigative information received to date and as available to me, it is my opinion that the decedent, a 9-year-old male, died of complications of diabetes mellitus. Contributing to death is diabetic ketoacidosis.

It is further my opinion that the manner of death is natural.

As with all death investigations, opinions expressed herein are amenable to change should new, reliable, and pertinent information come to light.

The Maricopa County Medical Examiner's Office is required by statute (A.R.S. § 11-594(A) (2) and (4)) to certify the cause and manner of death following completion of the death investigation of each case over

which it assumes jurisdiction, and to promptly execute a death certificate, on a form provided by the state registrar of vital statistics, indicating the cause and manner of death. The form provided by the state registrar of vital statistics includes five manners of death: homicide, suicide, accident, natural, and undetermined. The determination of manner of death is a forensic determination by the pathologist predicated upon the totality of all then-known forensic evidence and other circumstances surrounding the cause of death; it is not a legal determination of criminal or civil responsibility of any person(s) for the death.

POSTMORTEM EXAMINATION

CLOTHING AND PERSONAL EFFECTS

The body is received nude without personal effects.

EVIDENCE OF MEDICAL INTERVENTION AND ORGAN PROCUREMENT

Orogastric tube and endotracheal tubes protrude from the mouth, secured around the head. Electrocardiogram pads are affixed to the right shoulder. Intravascular catheters insert into the bilateral antecubital fossae. A hospital identification band encircles the right wrist. A pulse oximeter encircles the right second fingertip. An intravascular catheter inserts into the ventral left wrist. A brace encircles the left distal forearm and hand. Nonhemorrhagic coarsely sutured incisions cover the thorax and upper and lower extremities. The heart, liver, pancreas, spleen, adrenal glands and kidneys are absent.

EXTERNAL EXAMINATION

The body is received in a plastic body bag secured by a seal bearing the number 5616048, and is that of a 56-inch, 100-pound, normally-developed, well-nourished, adolescent male who appears compatible with the reported age of 9 years. The body is not embalmed and fails to display significant changes of decomposition. Rigor mortis is fully developed in the joints. Fixed dorsal lividity is present.

The scalp hair is brown, averaging 3 inches in length. The eyes are closed; the conjunctivae are pale and without petechiae; the sclerae are white; the corneae are clear; and the irides appear blue. The nares are patent. The ears are normal in location and formation. The facial bones are intact to palpation. The mouth reveals natural teeth in good condition.

The neck, chest, and abdomen are symmetrical and atraumatic.

The upper and lower extremities, including the hands and feet, appear normally formed and free of trauma. The fingernails are short and intact.

The external genitalia are those of a normal adolescent male and are atraumatic. The testes are palpated within the scrotal sac.

The back is straight and free of trauma. The anus is patent and unremarkable.

INTERNAL EXAMINATION

HEAD: The scalp is retracted and free of hemorrhage. The cranial cavity is opened exposing smooth, tough dura and no evidence of subdural, subarachnoid, or epidural hemorrhage. Removal of the dura uncovers an intact cranial and basilar skull without significant abnormality. The 1275 g brain has glistening, translucent meninges and appears normally formed. There is a marked cerebral edema and softening of the parenchyma. The brainstem shows petechial hemorrhage. On cut sections, the parenchyma is soft without evidence of infection, tumor, or trauma. The cerebral vessels follow the usual distribution and are free of significant arteriosclerotic changes.

BODY: The body is opened with a Y-shaped incision. Due to donor procurement, the thoracic cavity is continuous. The lungs, stomach, and bladder occupy their usual positions and relationships. The pleural, pericardial, and peritoneal cavities are free of abnormal fluid accumulations. Inspection of the abdominal cavity after evisceration reveals no significant musculoskeletal abnormality. The abdominal pannus averages 2 cm in thickness.

NECK: There is no evidence of infection, tumor, or trauma. The hyoid bone and laryngeal cartilages are intact. The airway is patent and unobstructed without significant inflammation or neoplasia. No cervical dislocations or fractures are present.

CARDIOVASCULAR SYSTEM: The heart and aorta are absent.

LUNGS: The right and left lungs weigh 200 g each and displays smooth and glistening pleural surfaces. On cut sections, the parenchyma is soft and exudes a green purulent material from the parenchymal bronchi and mainstem bronchi. Within the right lower lung lobe is a 2 cm in diameter hematoma. There is no evidence of tumor or trauma. The pulmonary vessels and airways are unobstructed. There is no evidence of congestion or edema.

ALIMENTARY SYSTEM: The tongue is atraumatic. The proximal esophagus is absent. The distal esophagus, stomach, and small and large intestines reveal no evidence of significant natural disease or trauma. The appendix is present. The stomach contains scant brown mucoid contents. The pancreas is absent.

HEPATOBILIARY SYSTEM: The liver and gallbladder are absent.

ENDOCRINE SYSTEM: The adrenal glands are absent. The thyroid gland is normal in size, shape, and location and is without abnormality on sectioning.

LYMPHORETICULAR SYSTEM: The spleen is absent.

GENITOURINARY SYSTEM: The right and left kidneys are absent. The bladder contains 160 mL of urine. The prostate gland is present and unremarkable.

MUSCULOSKELETAL SYSTEM: The vertebrae and sternum are absent. The bony framework, supporting musculature, and soft tissues are grossly normal.

TOXICOLOGY

Samples of blood and vitreous are collected and submitted for analysis (see also separate toxicology report).

CLC/Diskriter D: 12/28/2022 T: 12/30/2022