City and County of Denver

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AUTOPSY REPORT

Name of Decedent: DANIEL BREGGER **ME#:** 2021-3261

Date and time of death: AUGUST 29, 2021; 1927 HOURS **Age:** 33 YEARS

Date and time of autopsy: AUGUST 30, 2021; 0900 HOURS **Sex:** MALE

DIAGNOSES

I. Combined toxic effects of mitragynine and diphenhydramine
   A. Postmortem toxicology is positive for mitragynine, diphenhydramine, trazadone, and cannabinoids in femoral blood
   B. Mild cerebral edema
   C. Mild pulmonary edema and congestion with frothy fluid within the trachea

II. Moderate anthracosis of the lungs

III. Mild atherosclerosis of the aorta

IV. No evidence of significant recent trauma

TOXICOLOGY

REFERENCE LABORATORY: National Medical Services, Inc.
Horsham, PA

Expanded postmortem blood panel results:

Compound	Result	Units	Matrix Source
11-Hydroxy Delta-9 THC	4.0	ng/mL	001 - Femoral Blood
Delta-9 Carboxy THC	51	ng/mL	001 - Femoral Blood
Delta-9 THC	19	ng/mL	001 - Femoral Blood
Trazodone	0.098	mcg/mL	001 - Femoral Blood
Diphenhydramine	420	ng/mL	001 - Femoral Blood
Mitragynine	78	ng/mL	001 - Femoral Blood

Other than the above findings, examination of the specimen submitted did not reveal any positive findings of toxicological significance.

OPINION

This 33-year-old male, Daniel Bregger, died as a result of the combined toxic effects of mitragynine and diphenhydramine. The autopsy demonstrated mild cerebral and pulmonary edema. Postmortem toxicology was positive for mitragynine, diphenhydramine, trazadone, and cannabinoids in femoral blood. With the information available to me at this time, the manner of death, in my opinion, is accident.

Ian Puffenberger, M.D.
Forensic Pathologist

Report Signed: 11/05/2021

CIRCUMSTANCES OF DEATH: The decedent is a 33-year-old male (DOB: 08/04/1988) with a past medical history, per the medical record, of chronic ethanol abuse, illicit drug use, and tobacco use. He was found unresponsive and on his bed by a roommate. Evidence of ethanol, marijuana, and several mushrooms are identified at the scene. A rapid COVID-19 antigen assay is performed at the scene and was negative. Death was pronounced at the scene at 1927 hours on 08/29/2021.

IDENTIFICATION: Fingerprints and digital photographs are obtained. Identification is confirmed via comparison between antemortem and postmortem fingerprints.

CIRCUMSTANCES OF POSTMORTEM EXAMINATION: A postmortem examination on the body of Daniel Bregger is performed at the Denver Office of the Medical Examiner beginning at approximately 0900 hours on 08/30/2021. Lindsey McNaughton is assisting.

CLOTHING AND PERSONAL EFFECTS

The body is received clad in blue shorts, a grey T-shirt, and blue underpants. There are no personal effects on the body at the time of the autopsy.

EVIDENCE OF MEDICAL INTERVENTION

There is no evidence of medical intervention on the body at the time of the autopsy.

EXTERNAL EXAMINATION

The unembalmed body is that of an adult male with a weight of 135-pounds and a body length of 69-inches (BMI=19.9). Rigor mortis is weakly present. Livor mortis is posterior and blanches to pressure. The body temperature is cool to the touch.

The scalp hair is blonde in color, averages 1 1/2-inches in length, and is distributed normally. The eyes are without petechial hemorrhages. The irides appear blue. The teeth are natural and in good condition.

The thorax is symmetrical and normally developed. The abdomen is soft and flat. The external genitalia are those of a normal adult male, with both testes descended into the scrotum. There is no evidence of significant, recent trauma to the torso or to the urogenital area.

The upper extremities are normally developed and symmetrical with no clubbing or edema. The lower extremities are normally developed and symmetrical with no edema. There is a Medical Examiner's Office identification band on the right wrist.

The posterior aspects of the torso are symmetrical and devoid of acute injury pattern. The anus is unremarkable.

No tattoos or other significant identifying body marks are noted.

EVIDENCE OF TRAUMA

There is a 1/4 x 1/4-inch red abrasion on the left forehead. A 3/4-inch red abrasion is on the right lower abdomen. There is a 1/8 x 1/8-inch red abrasion on the dorsum of the right hand. Two abrasions measuring 1 1/2-inch and 2-inches respectively are on the right forearm. There is a 1/4 x 1/4-inch red abrasion near the left knee. There is a 1 1/2 x 1/2-inch area of red abrasions near the toes of the left foot, and there is a 1/2 x 1/4-inch red abrasion near the great toe of the right foot. A 3/4 x 1/2-inch red abrasion is on the dorsum of the left foot. The toenail on the left great toe is missing.

INTERNAL EXAMINATION

GENERAL DESCRIPTION:

The body is opened by a standard Y-shaped thoracoabdominal incision. All viscera occupy their appropriate anatomic relationships. Serous surfaces are smooth and glistening. There is no significant free fluid accumulation in the body cavities.

CARDIOVASCULAR SYSTEM:

The 310-gram heart occupies its usual mediastinal site. The external configuration is unremarkable. The epicardial surfaces are smooth. All major vessels arise in their appropriate anatomic relationships. The coronary arteries arise normally and are distributed in a right-dominant pattern with no significant atherosclerotic narrowing.

The myocardium is red-brown and firm. There are no areas of gross hemorrhage or scarring. No abnormal communications exist between the cardiac chambers. Ventricular thicknesses are left 1.5-cm, right 0.4-cm, and 1.4-cm in the interventricular septum. The cardiac valves have thin, pliable leaflets. The valve circumferences are appropriate to the caliber of the cardiac chambers. The valve cusps and surfaces are free of fusion or vegetations. The aorta is of normal caliber with all major arterial branches arising in their appropriate anatomic relationship. The intimal surfaces of the aorta are without aneurysm formation or dissection. Mild atherosclerotic changes of the aorta are noted. No systemic venous abnormalities are present.

RESPIRATORY SYSTEM:

The lung weights are 570-grams on the right and 480-grams on the left. The upper and lower airways are patent and of normal caliber with frothy pink fluid within the trachea. The pleural surfaces are smooth and remarkable for moderate anthracosis. The parenchyma is mildly edematous and congested, dark tan to red-purple, and exudes a slightly increased amount of blood and fluid. There are no areas of induration, consolidation, hemorrhage, or gross scarring. The pulmonary vessels are patent and of normal caliber.

DIGESTIVE/HEPATOBILIARY SYSTEM:

The oropharynx is grossly normal and unobstructed. The tongue is unremarkable. The esophagus is of normal caliber with a smooth mucosal lining. The gastroesophageal junction is well defined. The stomach has intact mucosal surfaces, and the lumen contains approximately 150-mL of brown-green fluid and partially digested food. No pills or pill fragments are identified. No areas of ulceration, erosion, hemorrhage, or scarring are present. The small and large intestines are unremarkable. The appendix is present. The lobular, tan pancreas is unremarkable. There are no areas of necrosis, gross hemorrhage, or space-occupying lesions. The pancreatic ducts are patent and of normal caliber. The 1670-gram liver has a smooth intact capsule covering dark-brown parenchyma. No localizing masses, lesions, or areas of hemorrhage are evident on external or cut surfaces. The intrahepatic and extrahepatic ducts are patent and of normal caliber. The gallbladder contains approximately 25-mL of dark green, viscid bile and no stones.

GENITOURINARY SYSTEM:

The kidneys weigh 150-grams on the right and 170-grams on the left. The capsules strip with ease and the cortical surfaces are smooth. The cortices are sharply delineated from the medullary pyramids. The calyces, pelvises and ureters are unremarkable. The renal vessels are patent and of normal caliber. The urinary bladder contains approximately 120-mL of cloudy, yellow urine. The mucosal surfaces are smooth. The prostate gland is unremarkable on cut sectioning. The testes are free of trauma or natural disease processes on cut sectioning.

HEMATOPOIETIC SYSTEM:

The 150-gram spleen occupies its usual anatomic site with an intact, smooth capsule. The parenchyma is essentially unremarkable. No gross abnormalities are noted. Regional lymph nodes have their usual distribution and appearance.

ENDOCRINE SYSTEM:

The pituitary and adrenal glands are grossly unremarkable. The thyroid gland is unremarkable grossly and cut sectioning reveals no lesions.

NECK:

The cervical spine is structurally intact. The epiglottis and laryngeal mucosa show no focal lesions. The hyoid bone and thyroid cartilage are intact. There are no hemorrhages in the strap muscles or soft tissues of the neck. The upper airway is patent.

MUSCULOSKELETAL SYSTEM:

Major muscle groups demonstrate no atrophic changes and are essentially symmetrical in development. The exposed axial and appendicular skeleton is free of abnormalities.

NERVOUS SYSTEM:

The scalp is reflected in the usual manner revealing no hemorrhages. The skull is intact and there are no fractures. The mildly edematous 1470-gram brain is covered by thin, clear, delicate leptomeninges.

The dura mater and falx cerebri are intact. There is good preservation of cerebral symmetry, with only mild flattening of gyri. Convolutional patterns remain intact. External landmarks are readily identified. There is no evidence of herniation. The cerebral vessels are intact with no evidence of aneurysm or thrombosis. Atherosclerotic changes are not demonstrated. Multiple coronal sections of cerebrum, cerebellum, and brainstem reveal no localized hemorrhages, masses, or lesions. The ventricular system is symmetrical, non-dilated and filled with clear fluid.

MICROSCOPIC DESCRIPTION

Representative sections of major organs are retained in formalin without preparation of glass slides.

ADDITIONAL PROCEDURES

Photographic images, fingerprints, and a DNA (blood) card are obtained at the time of the autopsy.

SPECIMENS

TOXICOLOGY: Samples of postmortem femoral blood are submitted to the toxicology laboratory for analysis. Samples of postmortem femoral blood, vitreous fluid, and urine are collected and retained.

STOCK: Samples of organs are collected and retained in formalin.

-END OF REPORT-