

OFFICE OF THE MEDICAL EXAMINER
56639 OVERSEAS HIGHWAY
MARATHON, FLORIDA 33050

AUTOPSY REPORT

NAME OF DECEASED:	EIMERS, Charles John
M.E. NUMBER:	13-0211
CROSS REFERENCE NUMBERS:	FDLE#: KW-37-0006, KWPD#: 13-5784
DATE OF DEATH:	12/04/2013 (1852)
DATE OF AUTOPSY:	12/12/2013 (0845)
COUNTY OF DEATH:	Monroe

The unembalmed body (measured and weighed upon arrival) is that of a 68 inches (172.7 centimeters), 190 pounds (86.4 kilograms), over weight (Body Mass Index of 29 Kg/M²), male, with predominantly European anthropological features and light pigmentation, who appears older than his recorded age of 61 years. Rigor mortis is fully developed in all muscle groups, but easily broken. Livor mortis is red-purple, posterior and fixed. The torso is cold to touch, following refrigeration.

The scalp hair is ¾ inch maximum length, brown with gray and straight. The irides are brown and the pupils are equal at 3 millimeters. The corneas are slightly cloudy and have arcus senilis. The sclerae and conjunctivae are free of petechiae, tache noire or chemosis. The ear lobes are pierced twice on the left, have bilateral creases and the left has two notches. The oral and nasal mucosae are unremarkable. The lips and frenula are unremarkable. The mouth is edentulous. The face has a ¼ inch maximum length beard and mustache of similar quality to his scalp hair. The anterior neck structures are midline.

The chest is symmetrical. The breasts are free of masses. The nipples have no lesions or discharge. The abdomen is flat. The penis is circumcised, with both testes descended. The scrotum has a mild degree of edema. The body hair distribution is normal. The extremities are symmetrical, with the lower legs having a mild to moderate degree of pitting edema. The fingernails are 1-2 millimeters in length and dirty, but unbroken. The lower back has a 4 by 4 ½ inches hairy patch in the midline. The pre-sacral region of the back has a 2 by 3 centimeters decubitus ulcer with the dermis visible. The anus is unremarkable. The left inguinal region has a 4 ½ inches long, curvilinear, well healed, surgical scar.

CLOTHING:

The body is received wearing a hospital gown. The left ear lobe contains a pair of yellow metal with small purple stone earrings. With the body is received an unmarked, white, plastic, hospital belongings bag which contains a pair of red shorts, a pair of black shorts and a small, zip-lock bag with a prescription bottle (see medication log).

MEDICAL THERAPY:

The laryngotracheal mucosa is reddened down to the vicinity of the carina. The body has a single, disposable, electrocardiographic electrode pad. The chest has no external contusion or abrasion. The anterior aspects of the right 2nd through 7th and left 2nd through 5th ribs are fractured. These fractures are associated with a moderate degree of extravasated blood into the surrounding soft tissues. The left clavicular region and the left inguinal region each have a gauze dressing overlying a needle puncture with an adjacent black suture. The pre-sacral region of the back has a plastic dressing. Both wrists are encircled by gauze dressings. The right wrist has a hospital identification bracelet, bearing, in part, the decedent's name. The tip of the left long finger has a disposable oxygen saturation probe.

WOUNDS:

1. The dorsum of the right wrist has a 9 by 4 centimeters, red-purple bruise, within which are several, small (maximum 12 by 5 millimeters), brown crusted abrasions.
2. The dorsum of the right hand has a 3.5 by 2.5 centimeters, light red-purple bruise.
3. The dorsum of the right 5th finger, overlying the proximal phalanges, has a 2 by 1.5 centimeters, red-purple bruise.
4. The dorsum of the distal portion of the left forearm has a 5 by 2 centimeters, red-purple bruise.
5. The dorsum of the left wrist has a transversely oriented, 12 centimeters long by up to 3 centimeters wide, red-purple bruise. Within this bruise are several, small (up to 7 by 8 millimeters), brown crusted abrasions.
6. The dorsum of the left hand has two, red-purple bruises which measure 3 by 1 and 2 by 1 centimeters.

Note: The skin over the metacarpophalangeal joints (knuckles) has no visible evidence of blunt impact. The bones of the hands have no fracture or dislocation by inspection and palpation.

The wounds, having been described, will not be repeated.

INTERNAL EXAMINATION:**BODY CAVITIES:**

The pneumothorax test is normal bilaterally. The great vessels and heart contain a normal amount of liquid blood. The right pleural cavity contains a measured 1083 millimeters of blood-tinged, watery fluid, while the left contains a measured 335 milliliters of a similar fluid. The pleural surfaces are smooth and shiny. The pericardial and peritoneal cavities are smooth, shiny and free of abnormal collections of fluids. The organs are normally situated and have no unusual odors.

HEAD:

The scalp has no contusions. The skull has no fractures. The epidural, subdural and subarachnoid spaces have no abnormal collections of fluids. The leptomeninges are thin and clear. The cranial nerves have no anomalies. The cerebral arteries are patent, with atherosclerosis, resulting in a maximum luminal obstruction of less than 25 percent, located in the basilar artery. The fresh brain weighs 1478 grams. The cerebral surface has a normal gyral pattern and no focal lesions, with flattened gyri, compressed sulci and uncal grooving, without cerebellar tonsillar coning or necrosis of the tonsillar tips. The cerebral cut surface has a normal ventricular system. The left basal ganglia have a 3 by 2 by millimeters, cystic, yellow-brown area. The brainstem and cerebellum are unremarkable on external and cut surfaces. The spinal cord, examined, is unremarkable.

NECK:

The strap muscles have no contusions or anomalies. The larynx and trachea are patent, with an unremarkable mucosa, except as indicated under treatment. The hyoid bone, cricoid cartilage and the thyroid cartilage are intact. The tongue has no contusions and the muscle is a homogenous red-brown.

CARDIOVASCULAR:

The great vessels arise and course normally. The vena cava have no thrombi. The pulmonary artery trunk and extrapulmonary artery branches have no thromboemboli or anomalies. The aorta is of normal caliber, with scattered, smooth, yellow, atherosclerotic plaques and streaks, without ulcerations.

The flabby, trimmed and empty heart weighs 501 grams (expected 286 to 366 grams, based on Zeek's formula or a maximum of 383 grams based on Molina and DiMaio). The epicardial surface is smooth and shiny, with a normal fat pad. The left dominant coronary artery system has normally located, patent ostia and scattered, eccentric to concentric, soft to hard, yellow, atherosclerotic plaques, with maximal luminal obstructions of: left main coronary artery – less than 10 percent; left anterior descending coronary artery – 25 to 30 percent in its mid-portion; left circumflex coronary artery – 40 to 50 percent in its distal portion; right coronary artery – less than 25 percent. The cardiac chambers have

chronic dilation. The left ventricle has a short axis cross sectional diameter of 5.5 centimeters, measured 2.5 centimeters distal to the mitral annulus. The right ventricle reaches the cardiac apex and has a circumference of 22.2 centimeters, measured 2 centimeters distal to the tricuspid annulus. The myocardium is a homogenous red-brown. The left ventricular free wall and the interventricular septum each measure 10 millimeters in thickness, while the right ventricular wall is 3.5 millimeters thick. The endocardium is smooth and shiny, without mural thrombi or fibrosis. The cardiac valves are unremarkable. The valve cusps are free of vegetations, fenestrations or anomalies. The valve circumferences, measured in millimeters with the expected value in parentheses are as follows: aortic - 82(81), mitral - 104(98), pulmonary - 92(76) and tricuspid - 125(118).

RESPIRATORY:

The right lung weighs 644 grams, while the left lung weighs 609 grams (expected approximately 715 grams combined, based on ideal body weight). The normally lobed, visceral pleural surfaces are smooth and shiny, with a moderate to marked degree of subpleural, green-black pigment deposition. The cut surfaces are red-brown and exude a moderate amount of dark, liquid blood and a mild amount of blood-tinged froth, without tumor nodules, cavitations or consolidations. The intrapulmonary airways, examined, are patent, with linings of tan exudate. The intrapulmonary arterial branches, examined, have no thromboemboli.

LIVER, GALLBLADDER AND PANCREAS:

The liver weighs 1949 grams. The capsular surface is smooth and shiny, with blunt edges. The cut surface is a mottled light and dark red-brown, with a normal consistency and no tumor nodules or cirrhosis. The edematous walled gallbladder contains a measured 32 milliliters of red-brown bile and no stones. The mucosa is unremarkable. The common bile duct is of normal caliber, patent and has no stones. The pancreas is of normal consistency and has red-brown, lobulated parenchyma.

HEMIC AND LYMPHATIC:

The spleen weighs 227 grams (expected maximum of 225 grams, based on age, race and gender). The capsular surface is dull red-purple and smooth. The cut surface is red-brown, with a firm consistency and no tumor nodules or infarctions. The palatine tonsils are absent. The lymph nodes, examined, are unremarkable. The thymus is atrophic. The bone marrow, examined, is a homogenous red-brown.

GENITOURINARY:

The right kidney weighs 158 grams, while the left kidney weighs 159 grams. The capsules strip with ease from the smooth subcapsular surfaces. The cut surfaces have well demarcated corticomedullary junctions, without tumor nodules, cysts or scars. The calyces, pelvises and ureters are of normal diameter and have no stones. The urinary

bladder is empty and the mucosa is unremarkable, except for focal reddening in the trigone region. The prostate is normal in size and consistency, with a tan cut surface. The testes have tan, stringy parenchyma.

DIGESTIVE:

The stomach contains a measured 43 milliliters of red-brown liquid, without partially digested food, pill fragments or unusual odors. The esophagus, stomach and duodenum are patent and free of ulcerations. The small and large intestines, including the cecal appendix, are unremarkable.

ENDOCRINE:

The thyroid is normally situated about the trachea and has a homogeneous brown cut surface. The adrenals have thin, yellow cortices surrounding dark red-brown medulla. The pituitary is not enlarged.

MUSCULOSKELETAL:

The subcutaneous fat, at the umbilicus, measures 3 centimeters in thickness. The skeletal muscle, examined, is unremarkable, except as indicated. The clavicles, sternum, pelvis and spine have no palpable or visible fractures.

MICROSCOPIC EXAMINATION:

HEART: Enlarged myocytes with large, blunt ended nuclei are associated with focal interstitial and perivascular fibrosis. No acute myocyte necrosis, inflammation or significant myofiber disarray is located.

LUNG: Vascular congestion is noted. Smoking changes are associated with emphysematous changes and chronic bronchitis.

LIVER: Centrilobular vascular congestion with pigment deposition and hepatocellular necrosis is present, but not associated with regenerative changes or fibrosis.

KIDNEY: Early hyaline and hyperplastic arteriolosclerosis is not associated with glomerulosclerosis. Tubular autolysis is present.

BRAIN: The leptomeninges are unremarkable. Focal, mild age related changes are noted. Neurons have diffuse, anoxic changes ("red neurons"). Ammon's Horn has no sclerosis. The section of basal ganglion has a focus of cystic encephalomalacia. No evidence of infection, neoplasia or vascular disease is seen.

TOXICOLOGICAL EXAMINATION:

Specimens were retained, but none submitted due to the length of hospitalization and lack of admission specimens.

E. Hunt Scheuerman, MD
District 16 Medical Examiner
EHS: hs

OFFICE OF THE MEDICAL EXAMINER
56639 Overseas Highway
Marathon, Florida 33050

MEDICAL EXAMINER REPORT
Opinion Section

NAME OF DECEASED: EIMERS, Charles John
M.E. NUMBER: 13-0211

DIAGNOSES:

1. Dilated cardiomyopathy
 - a. Cardiomegaly (501 grams)
 - b. Peripheral edema
 - c. Pulmonary vascular congestion and edema
 - d. Chronic passive congestion of the liver
 - e. Congestive splenomegaly
 - f. Cardiac dysrhythmia (ventricular fibrillation)
 - (1). Artifacts of resuscitation
 - (a). Multiple, bilateral, anterior rib fractures
 - (b). Reddening of laryngo-tracheal mucosa (endotracheal tube)
 - (2). Anoxic encephalopathy
2. Minor blunt impact wounds – contusions and abrasions of the upper extremities
3. Chronic bronchitis with emphysema
4. Encephalomalacia, small, left basal ganglia ("lacunar infarct" or microvascular disease)

CAUSE OF DEATH:

Anoxic Encephalopathy
Due to
Cardiac Dysrhythmia
Due to
Dilated Cardiomyopathy

CONTRIBUTORY FACTORS:

Stress of struggling with police

MANNER OF DEATH:

Accident

How injury occurred: Struggled during arrest by police officers

Date of injury: 11/28/2013 **Time:** 0833

Location: 1405 Duval Street, Key West, Florida 33040

DISCUSSION:

History – On 11/28/2013 this individual was involved in a traffic stop followed by a slow speed pursuit and then an attempted arrest by Key West Police officers. During that attempted arrest and while struggling with police officers, he became unresponsive. He received basic life support initially and advanced life support, from EMS, including electrical cardioversion, oxygen and vascular access. He was transported to hospital, where he was found to be comatose with a cardiac rhythm of atrial fibrillation, with a rapid ventricular response and a bi-fascicular block. A CT scan of the brain revealed no acute findings, only evidence of cerebral atrophy and microvascular disease including remote lacunar infarction. His chest x-ray was consistent with congestive heart failure. A urine screen for drugs of abuse failed to detect any substances. His blood ethanol (beverage alcohol) was reported as less than 10 mg/dL (this is the reporting level or the level above which results are reported and is the same as “none detected”). He was admitted to the hospital. His hospital course was marked by persistent coma due to anoxic encephalopathy accompanied by seizures controlled by intravenous benzodiazepines. He was removed from life support by his family and pronounced dead on 12/4/2013. During this hospitalization it was learned that he had a history of severe non-ischemic cardiomyopathy (ejection fraction of 5-10 %) and congestive heart failure initially diagnosed in October 2013 in another state.

Autopsy findings – Pertinent positives: see diagnosis #1.

Incidental findings: see diagnoses # 2 – 4.

Pertinent negatives: no inconsistent trauma.

Toxicology – Toxicology testing was not performed on post-mortem specimens in this case because he had been hospitalized for 7 days. No admission specimens remained in the hospital laboratory and therefore could not be tested. He did have a urine screen for drugs of abuse and a blood ethanol (beverage alcohol) test in the emergency department on 11/28/2013. The reported results of these tests are the equivalent of “none detected”.

Summary - The certification of the cause and manner of death, in any case, are opinions based on investigation and autopsy findings of the medical examiner/ forensic pathologist. In the current case, the investigation consisted of the decedents past medical history, the investigation by the Florida Department of Law Enforcement (FDLE) and the autopsy findings, both positive and negative. The decedent had a history of a dilated cardiomyopathy of uncertain etiology resulting in a marked reduction in his cardiac output. Mr. Eimers was at risk of a sudden death, at any time, due to either a chaotic cardiac rhythm or worsening of his congestive heart failure. His sudden change from struggling to unresponsiveness is evidence for a dysrhythmia. Due to the resulting cardiac arrest and the resultant hypoxia (low blood oxygen), he suffered irreversible brain damage.

Contributory factors were then considered, both in the history of the terminal events and at autopsy. The first question considered was if an electromechanical device (Taser) was used. The FDLE investigation revealed that a Taser was drawn and readied for use by an officer. However, it was never used on Mr. Eimers. At autopsy no wounds consistent the use of a Taser were found, further confirmation that a Taser was not used. The second possible contributory factor considered was asphyxia due to facial position in the sand (smothering). The FDLE investigation concluded that his face was not forced into the sand, but rather, as he struggled, his face moved back and forth across the sand. Audio recordings from the event revealed that Mr. Eimers repeatedly said "No". Such verbalization would not have been possible if he had been smothering in the sand. Initial photographs, taken by crime scene investigators, at the hospital, show a light dusting of sand on his face and in the outer edge (vestibule) of the nose. At autopsy no sand was found in his airways. The next question considered was that of possible blunt force impact to vital areas. The FDLE investigation found no evidence of such force being used. A few, minor, blunt impact wounds were found on his hands and arms at autopsy, but no evidence of impact to the head, neck or torso was found. The final possible contributory factor considered was the stress(s) of his resisting arrest and being subdued. A struggle with officers was documented. This struggle would most likely have resulted in an elevation of circulating catecholamines (chemicals from his adrenal glands) in his blood. The increase in catecholamines would most likely have had a deleterious effect on his already compromised heart function. The struggle and its expected stress were greater than what would be encountered by a similarly cardiac impaired individual during the course of normal activities of daily living. Therefore, this stress was considered to be a contributory factor in his death.

In Florida, the medical certification of the manner of death may be natural, accident, suicide, homicide or undetermined. If a cause of death is natural, generally the manner of death is also natural, unless, as in this case, a non-natural contributory factor is present. In other words a natural manner of death cannot be used for Mr. Eimers because of the stress of the struggle. For clarification, a similarly ill individual, leisurely swimming in a pool (normal activity of daily living), who was witnessed to collapse and subsequently die would be certified a natural death. That same individual, swimming in rough seas and a strong ocean current (stresses greater than the normal activities of daily living) would not be certified as a natural death. Undetermined manner of death is reserved for cases where no cause of death is identified or where two or more causes or manners have a relatively equal possibility. In my opinion, undetermined manner of death should not be used in this case. Nothing in the FDLE's investigation of the events of November 28, 2013 suggest that Mr. Eimers was attempting to commit suicide. I am left with either accident or homicide for a manner of death. The distinction between these two can be subtle. The legal definition of homicide, as I understand it, is simply death at the hands of another, without regard to intent. Homicide, in that regard, does not necessarily mean murder, but may include such entities as some traffic collisions and the justifiable use of deadly force to protect another life. An accident is an unforeseeable and unexpected turn of events that causes injury (in the context of this case). The event(s) is (are) not deliberately caused and is (are) not inevitable. In other words, an accident is without intention, unexpected and unforeseen. The FDLE investigation did not reveal any use of

deadly force. Therefore, when making the differentiation of accident versus homicide, in this case, I had to consider, to some degree, intent and whether the outcome (cardiac dysrhythmia ultimately leading to death) was to be expected. Police officers, frequently in their normal duties, are required to physically restrain/ subdue a resisting subject. The outcome of the ensuing struggle is only very rarely a severe injury or death. In this case, there is no evidence that the officers could have known about his medical condition. It is reasonable to assume that the officers' intent was to restrain and arrest Mr. Eimers. In my opinion, the sudden dysrhythmia, which ultimately lead to his death, was unexpected and unforeseen. Therefore, the best certification for the manner of death is "Accident".

E. Hunt Scheuerman, MD
District 16 Medical Examiner
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