RIVERO, Eduardo
September 25, 2016...12:30PM

Case No. 2016-02910

CAUSE OF DEATH:
Boat Crash

Kenneth Hutchins, M.D.
Associate Medical Examiner

NOTE: The cause of death is based on the totality of the investigative data to date, which may not be included in the autopsy or external examination protocol.
<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>SPECIMEN</th>
<th>RESULT</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>Blood - Iliac Vein</td>
<td>0.065  %</td>
<td>GC-Headspace</td>
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<tr>
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<td>Urine</td>
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<td>EMIT</td>
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<tr>
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<td>Urine</td>
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<td>EMIT</td>
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<tr>
<td>CANNABINOIDS</td>
<td>Urine</td>
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<tr>
<td>OPIATES</td>
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<tr>
<td>OXYCODONE</td>
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<tr>
<td>BENZOYLECGONINE</td>
<td>Urine</td>
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<td>EMIT</td>
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<tr>
<td>BENZOYLECGONINE</td>
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<td>GC-TSD-FID-MS</td>
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<td>GC-TSD-FID-MS</td>
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<td>METHYLECGONINE</td>
<td>Blood - Iliac Vein</td>
<td>DETECTED</td>
<td>GC-TSD-FID-MS</td>
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</table>
**TOXICOLOGY REPORT**

**ME Case #** 2016-02910  
**Decedents Name:** RIVERO, Eduardo

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<th>SUBSTANCE</th>
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<td>ACID NEUTRAL DRUGS</td>
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Reviewed By:

Kenneth Hutchins, M.D.  
Associate Medical Examiner  
September 30, 2016  6:48 am

Diane M. Boland Ph.D, F-ABFT  
Toxicology Division Director  
September 29, 2016  11:24 am

QC by: LZ

Res: 27261  
Page 2 of 2
ATTENDEES:

FORENSIC TECHNICIAN: Andrew Okehi
PHOTOGRAPHER: Belmarie Lyons

EXTERNAL EXAMINATION:

The body is a well-developed, well-nourished, 182 pound, 5 foot 10 inch white man who appears compatible with the reported age of 25 years. The body is refrigerated, well preserved, and not embalmed. The body mass index (BMI) is 26 kilograms per meter squared. A green plastic bracelet around the left ankle has the inscription “260396.”

The head has brown-blond scalp hair which is shorter on the sides. The face is covered by a mustache and beard. The irides are green. The corneas are clear. The conjunctivae are pale and have no petechiae. The sclerae are white. The external auditory canals, external nares, and oral cavity are free of lesions and foreign material. The nasal bones are intact. The teeth are natural. The tongue is free of contusion or laceration. There is no buccal mucosal injury.

The neck is symmetrical without scars, masses, or injury.

The chest is symmetrical and the nipples and breasts are free of abnormality and palpable masses.

The abdomen is flat. The posterior torso is without note.

The fingernails are intact. There are no fractures, lacerations, or deformities of the extremities. The joints are not deformed.

There is a tattoo of a radio on the right chest. A sleeve tattoo of angels, a snake, a compass and "life is short heaven is forever" is on the right arm. A colorful tattoo of building's, palm trees, MIA and a star with buildings, is on the upper left arm. A tattoo of faith is on the left wrist. A tattoo of a non English word is on the dorsal left arm. A tattoo of "never back down" is on the lower left leg. A tattoo of MJCHY (?) is on the back of the right leg.

The external genitalia are those of an adult uncircumcised male. The external anus has no abnormalities.

EVIDENCE OF INJURY:

A 6 x 6 centimeter area of punctate to linear, red-pink abrasions and superficial lacerations, ranging from 0.5 to 3 centimeters in greatest dimension is on the mid to right forehead. A 3 x 0.5 centimeter obliquely oriented, full thickness laceration is on the left forehead associated with a superior 1.5 centimeter curvilinear red-pink abrasion. A 4 x 1.3 centimeter red-pink abrasion is on the bridge and tip of the nose. A 3.5 centimeter red-pink linear abrasion-laceration is on the mid-chin. A
2 centimeter laceration is on the undersurface of the chin. There is a slight, blue, left periorbital ecchymosis. Small red-pink abrasions are below the left eye.

There is subgaleal hematoma associated with the head injuries. A 3.5 centimeter linear non-displaced fracture is in the left anterior cranial fossa of the frontal bone. A 4.5 centimeter non-displaced linear fracture is in the left middle cranial fossa of the temporal bone. Small areas of subarachnoid hemorrhage are on the right cerebellum, inferior left temporal lobe and inferior frontal lobes of brain. There are punctate hemorrhagic areas in the white matter of the left temporal lobe of the brain.

A 4 x 3 centimeter area of linear, red-pink abrasions is on the right chest at the axillary area. A 2 x 0.1 centimeter red-brown abrasion is on the mid-upper left chest. Two red-pink abrasions are on the anterior left chest medial to the nipple, and are 2 x 0.3 and 1.5 x 0.3 centimeters. A 3 x 1.5 centimeter slight red-pink abrasion is on the lower left chest. A 6.5 x 2.5 centimeter purple-blue contusion-abrasion is on the mid right back. A 20 x 10 centimeter L shaped red-brown abrasion is on the mid to lower left back above the buttock.

There are 3 linear red-brown abrasions on the dorsal right hand and wrist ranging from 3 to 5 centimeters and located proximal to the forefinger and thumb. Linear red-pink abrasions are on the medial upper right arm. A 5 x 1.5 red-blue contusion is on the anterior right leg.

Copious amounts of pink-red foam exudes from the mouth and nostrils. There is copious foamy fluid within the bronchi and lungs. The lungs are heavy and edematous. There is less than 1 milliliter of red-pink fluid in the sphenoid sinus. Red watery fluid is in the stomach.

INTERNAL EXAMINATION:

There are no abnormalities of the anterior chest and abdominal walls. The ribs, sternum, and clavicles are intact. There are no abnormal collections of fluid or adhesions within the body cavities. The mesothelial surfaces are smooth and glistening. The diaphragm is not elevated. All body organs are in the normal anatomical position. The subcutaneous fat layer of the abdominal wall is up to 2.5 centimeters thick.

The soft tissues of the neck, including strap muscles and large vessels, reveal no abnormalities. The hyoid bone and larynx are intact.

The 340 gram heart has a smooth and glistening pericardial surface. The pericardial sac is free of significant fluid or adhesions. The epicardium is shiny with a moderate amount of epicardial fat. The coronary arteries arise normally and are right dominant. There is no evidence of atherosclerotic change within any of the coronary arteries. The chambers and valves exhibit the usual position relationship. The cusps of the aortic and pulmonic valves and leaflets of the mitral and tricuspid valves are thin pliable and translucent. There are no abnormalities of the chordae tendineae or papillary muscles. The myocardium is brown-red and firm. The left and right ventricles are 1.2 and 0.4 centimeters respectively. The endocardium is thin and glistening. The atrial and ventricular septa
are intact. The atria are not dilated and are free of thrombi. The aorta and its major branches arise normally, follow the usual course, and are widely patent with no atherosclerotic change of its thoraco-abdominal portions. The vena cava and its major tributaries return to the heart in the usual distribution and are free of thrombi.

The upper airway, trachea, and mainstem bronchi are clear of debris and foreign material but exudes copious amounts of white foam. The mucosal surfaces are smooth, yellow-tan, and unremarkable. The right and left lungs are 920 grams and 970 grams, respectively. The lungs have normal lobar configurations. The pleural surfaces are smooth and glistening. The pulmonary parenchyma is red-purple and exudes copious amounts of frothy fluid. The lungs have no focal lesions. The patent, normally developed pulmonary arteries have no thrombi or emboli. The bronchial and mediastinal lymph nodes are not enlarged.

The tongue is without injury or abnormality. The esophagus is lined by gray-white smooth mucosa. There is no evidence of dilation, stenosis, or varices. The stomach is normal in size and shape. The gastric mucosa is free of ulcerations and is arranged in the usual rugal folds. The stomach contains approximately 400 milliliters of red, watery fluid. The pylorus is not deformed and has a normal circumference. The small intestine is normal in length, configuration, and diameter and has a smooth, shiny serosal surface. The mesentery has a normal insertion, the vessels are patent, and the lymph nodes are not enlarged. The large intestine has a smooth shiny serosal surface and no palpable masses or obstructions. The appendix is normal.

The 1840 gram liver has a smooth, glistening, intact capsule covering dark brown congested parenchyma with no focal lesions. The lobular pattern is preserved. The extra and intra hepatic vessels are patent. The gallbladder contains 10 milliliters of yellow-green mucoid bile and no calculi. The mucosa is velvety. The cystic, common and hepatic bile ducts are free of calculi.

The pancreas is pink-tan and normal in size. The lobular architecture is intact. The duct is patent.

The spleen is 210 grams and has a smooth, intact capsule covering red-purple, firm parenchyma with inconspicuous lymphoid follicles. The bone marrow of the ribs has a soft consistency and is dark red. The regional lymph nodes of the neck, chest, abdomen, and pelvis are unremarkable.

The pituitary gland is not enlarged. The thyroid gland has a normal size and shape. The parenchymal surface is tan-brown. The adrenal glands have a yellow cortices and brown medullae of normal thicknesses.

The right and left kidneys are 170 grams each. The renal capsules are smooth, thin, and semi-transparent. The cortical surfaces are smooth and red brown. The renal cortices are normal in thickness, slightly congested, and sharply delineated from the medullary pyramids, which are tan and unremarkable. The calyces, pelves, and ureters are non-dilated and drain normally. The urinary
bladder contains 50 milliliters of clear, yellow urine. The mucosa is gray-tan and wrinkled. The inferior vena cava is patent. The prostate is not enlarged.

Voluntary muscle groups of the anterior neck, chest wall, abdomen, and iliopsoas are symmetrical, firm, and red-brown.

The bones of the cervical, thoracic, and lumbar spine, the ribs, and the pelvis show no abnormalities.

The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage.

The leptomeninges are thin and delicate. The brain is 1560 grams. The cerebral hemispheres are symmetrical. There is diffuse flattening of the gyri and effacement of the sulci (cerebral edema). The structures at the base of the brain, including cranial nerves and blood vessels are intact. The gray-white matter border is distinct. The deep white matter shows no softening, nodules or masses. The deep gray matter, including caudate, putamen, globus pallidus, and thalamus are normal in size, configuration, and coloration. The ventricular system is not dilated or compressed. The hippocampal formations are normally formed and normally placed. The mammillary bodies are normal. The substantia nigra is normally pigmented for age. The Aqueduct of Sylvius is patent. The cerebral peduncles are normal in size and coloration. The pontine white matter and fourth ventricle are without abnormality. The locus coeruleus is normally pigmented. The cerebellar folia, deep white matter, and dentate nucleus show no abnormality. There are no abnormalities of the medulla.

**AUTOPSY FINDINGS:**

1. Blunt force injuries of the head
   A. Abrasions, lacerations of head
   B. Subgaleal hemorrhage
   C. Skull fractures
   D. Subarachnoid hemorrhage
   E. Punctate hemorrhagic areas in left temporal lobe white matter

2. Blunt force injury of torso and extremities
   A. Abrasions, contusions

3. Cerebral edema

5. Pulmonary edema, heavy lungs, foamy fluid from mouth, nose and airways

6. Watery fluid in stomach

6. Fluid in sphenoid sinus
THE MIAMI-DADE COUNTY MEDICAL EXAMINER DEPARTMENT, MIAMI, FLORIDA

RIVERO, Eduardo.....September 25, 2016...12:30PM.................Case No. 2016-02910

AUTOPSY PROTOCOL

TISSUES SUBMITTED FOR HISTOLOGIC EMBEDMENT:

Heart, lung, liver, kidney, brain

Kenneth Hutchins, M.D.
Associate Medical Examiner

Date: September 30, 2016