Alameda County Coroner's Bureau

2901 Peralta Oaks Court
Oakland, CA 94605
(510) 382-3000

AUTOPSY REPORT

Name:	MARIO GONZALEZ ARENALES	**Case #**:	2021-02197
Age:	26 Years	**Sex**:	Male
Date of death:	04/19/2021	**Date of autopsy**:	04/21/2021
Time of death:	1145 hours	**Time of autopsy**:	0915 hours

CAUSE OF DEATH:

Toxic effects of methamphetamine

OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH:

Physiologic stress of altercation and restraint; Morbid obesity; Alcoholism

VIVIAN S. SNYDER, D.O.
Chief Forensic Pathologist

9/25/2021
DATE

MAJOR AUTOPSY FINDINGS

I. Toxic effects of methamphetamine:
   A. History of methamphetamine abuse
   B. Toxicology testing detected methamphetamine and amphetamine; see Toxicology Report

II. Physiologic stress of altercation and restraint:
   A. History of pre-terminal physical altercation and restraint, handcuffed in prone position, with pressure being applied to posterior torso and legs

III. Morbid obesity:
   A. Body mass index = 47.25
   B. Cardiomegaly (450 grams) with mild four-chamber dilation

IV. Alcoholism:
   A. History of alcoholism
   B. Marked hepatomegaly (3920 grams) with severe steatosis
   C. Toxicology testing detected ethanol (see Toxicology Report)

V. Status-post attempted resuscitation:
   A. Multiple rib fractures
   B. Liver laceration
      1. Hemoperitoneum (200 mL)

VI. Minor superficial blunt trauma:
   A. Cutaneous abrasions and contusions
   B. No lethal injuries

SUMMARY & OPINION

According to the Investigator's Report, available medical records, information provided by the Alameda Police Department, information provided by the Alameda County Sheriff's Office, and by independent review of body worn camera footage by the Alameda County Coroner's Bureau, Mr. Mario Gonzalez Arenales (MGA) was a 26-year-old man with a medical history including alcohol and methamphetamine abuse.

Please note that the "times" listed in this section are approximate "time stamps" documented in the Body Worn Camera footage and are not representative of the actual time of occurrence.

On the morning of 04/19/2021, a City of Alameda Police Department (APD) Officer ("Officer 1") was dispatched to Oak Street in Alameda, CA for a report of a man with a possible "psychiatric emergency". When he arrived at the park (17:43:38), MGA was pacing around the park and appeared to be talking to himself. The Officer also observed two shopping hand baskets containing alcohol containers. The Officer attempted to talk to MGA, but according to the Officer he was not making any sense. A second APD Officer ("Officer 2") then approached the park from another direction (17:50:34). The Officers continued to try to speak with MGA and get him to identify himself, but he was not speaking coherently. The Officers observed that MGA was intoxicated and not steady on his feet. MGA then tried to put his hands in his pockets. The Officers asked him to keep his hands out of his pockets; they then determined it was necessary to handcuff MGA. At 17:52:44 Officer 1 grabbed MGA's left wrist while Officer 2 grabbed MGA's right arm and was able to place MGA's right arm behind his back.

Officer 1 had difficulty positioning MGA's left arm behind his back. The Officers continued to struggle with MGA and were unable to handcuff him while the three of them were standing, so they determined that they would have to move him down to the ground. The two officers continued to struggle with MGA for awhile in the standing position with each officer holding one arm and MGA facing forward and downward. The Officers attempted

to transition MGA to the ground, but MGA was able to resist these efforts until all three men landed on the ground at approximately 17:55:30.

When they all landed on the ground, MGA was in the prone position. Initially Officer 2 had a knee on MGA's lower back, then he repositioned and had his torso over the top of MGA's head, neck, and upper shoulders, with his left arm tucked under MGA's right arm. Officer 2 then shifted and had his torso over MGA, with his legs on MGA's left side and his arms on MGA's right side, while he was trying to pull MGA's right arm out from underneath MGA. At this time, Officer 1 was on top of MGA's legs.

At approximately 17:56:29, Officer 2 repositioned again; he brought his whole body over to MGA's right side and had both arms in contact with MGA's back and appeared to have a portion of his body weight on MGA.

Around this time, a third person approached the incident scene – a City of Alameda Parking Technician. This person began to control MGA's legs. At this point, Officer 2 was able to bring MGA's right arm behind MGA, and then the Officers were able to handcuff MGA. Officer 2 had both forearms in contact with MGA's back and appeared to be leaning forward onto him. After MGA was handcuffed, Officer 1 "climbed off MGA and held him down by his left elbow so he couldn't roll over".

At approximately 17:57:45 Officer 2 repositioned again and placed his right knee on MGA's upper back. Shortly after that, Officer 1 had his right arm on MGA's back and Officer 2 had his knee on MGA's right upper back/shoulder; Officer 2 then repositioned again and had his right elbow on MGA's back. During the attempts to restrain MGA, he was seen to be moving, talking, moaning, and yelling.

At approximately 17:58:36 a third APD officer ("Officer 3") approached the scene. At this time, Officers 1 and 2 were each controlling an arm and the third person was controlling his legs by laying on top of them. Officer 3 then took over control of MGA's legs and described MGA as actively trying to kick upward with his legs, bending at the knees, and

moving his heels "violently" upwards. He placed his knees and shins over the back of MGA's calves and controlled his ankles to keep him from bending at the knees. He described MGA as "incredibly strong and combative" and that MGA was trying to kick upwards and "buck" Officer 3 off.

At approximately 17:58:48 Officer 1 was holding MGA's right shoulder/arm with both of his arms and Officer 2 had his right knee on MGA's right upper back, controlling MGA's hands with his hands; he then repositioned to also have his right elbow on MGA's back. Officer 1 had at least one arm on MGA's back. At this time, MGA was struggling, talking, moaning, and yelling.

At 18:00:24 Officer 2 pointed out that there was "no weight on his chest". A few seconds after that, MGA appeared to be unresponsive. At 18:00:36 the Officers turned MGA onto his right side. At 18:00:57 they checked for a pulse. At 18:01:02 they turned MGA supine. At 18:01:15 cardiopulmonary resuscitation (CPR) was initiated. At 18:02:27 they placed MGA on his left side in the "recovery position". At 18:02:52 they checked for a pulse and could not find one, and they turned him supine and resumed CPR. At 18:03:52 the first dose of Narcan was given.

At 18:05:58 paramedics arrived and took over care of MGA. Upon arrival of Alameda Fire Department (AFD), APD Officers were performing CPR. AFD confirmed that MGA was pulseless and apneic. Paramedics took over cardiopulmonary resuscitation and then transported MGA to Alameda Hospital. Upon arrival to the hospital, he was in cardiac arrest, had no pulse, and was not breathing. Hospital staff continued CPR, established a better airway, monitored heart rhythm, administered medications, performed a bedside cardiac ultrasound, and determined that he was not in a shockable rhythm. Advanced cardiac life support continued in the Emergency Room, for a total of 40 minutes of CPR. There was never any improvement in cardiac rhythm and return of spontaneous circulation never occurred. A bedside ultrasound showed cardiac standstill. Time of death was pronounced at 1145 hours.

A forensic autopsy demonstrated features of morbid obesity and alcoholism including an enlarged and dilated heart (cardiomegaly) and an enlarged liver (hepatomegaly) that had severe fatty change (steatosis). The autopsy did not demonstrate any lethal injuries. Broken ribs (rib fractures) and liver tear (laceration) were documented at autopsy – features that are consistent with the consequences of aggressive resuscitative efforts.

Toxicology testing detected methamphetamine (907 ng/mL), amphetamine (methamphetamine metabolite; 134 ng/mL), naloxone (50 ng/mL), and ethanol (< 0.02 grams %). Specialized lab tests (vitreous chemistry) did not show any pathologic electrolyte abnormalities.

Based on the totality of available information, including investigative, autopsy, and laboratory findings, it is apparent that Mr. Gonzalez Arenales experienced cardiopulmonary arrest because of multiple factors. The methamphetamine detected in his blood combined with his enlarged and dilated heart could have together resulted in a fatal cardiac arrhythmia. During the interaction with law enforcement agents, he was face down on the ground (prone) with his hands handcuffed behind his back, and at times the officers were applying pressure to his torso and legs with at least some of the weight of their bodies. The stress of the altercation and restraint combined with prone positioning in the setting of morbid obesity and recent use of methamphetamine placed further strain on Mr. Gonzalez Arenales' heart. Therefore, the cause of death is the **toxic effects of methamphetamine**, with the **physiologic stress of altercation and restraint**, **morbid obesity**, and **alcoholism** contributing to the process of dying.

Please note this report underwent formal peer review.

INTRODUCTION

The autopsy is performed under the legal authority of the Alameda County Coroner's Bureau as defined in California Code § 27491. The examination is performed at the Alameda County Coroner's Bureau at 2901 Peralta Oaks Court, Oakland, CA, 94605.

Identification and Receipt:

The body is received in a blue body pouch, sealed with red seal number "6119004". The seal is broken at 0915 hours. A white sheet overlies the body. A white portable patient transport unit is beneath the body. Two Coroner's identification tags that are inscribed with the decedent's name and case number are affixed to the outside of the bag. Paper bags cover the hands, secured with zip ties. A hospital identification band bearing the decedent's name is around the left wrist.

Autopsy Assistants:

The case pathologist is assisted by Sheriff's Technician Ermelinda Vance.

Outside Observers:

The following individuals are in attendance at the autopsy:

- Sergeant Spencer Mountain, Alameda Police Department
- Deputy Jacob Swalwell, Alameda County Sheriff's Office
- Deputy Rob Young, Alameda County Sheriff's Office

Photography:

Autopsy photographs are taken by:

- Vivian Snyder, DO
- Sheriff's Technician Ermelinda Vance

EXTERNAL EXAMINATION

General:

Height (inches)	65
Weight (pounds)	284
BMI (calculated)	47.25

The body is that of a normally developed, morbidly obese, medium-complexioned man appearing consistent with the listed age of 26 years.

Clothing and Personal Effects:

The body is received wearing the following items:

1. A Navy blue and tan hooded jacket with a zipper; bark, plant material, and hairs are scattered on the jacket
2. A dark gray T-shirt, previously cut
3. A black and brown belt with a gray metal buckle
4. A pair of gray and black socks
5. A pair of black shoes

Head:

The scalp has short black hair without evidence of alopecia. Facial hair consists of a short mustache and beard. The scalp and face have no scars. The eyes have brown

irides and clear corneas. The bulbar and palpebral conjunctivae are mildly congested and free of edema and petechiae. The ears, nose, and lips are unremarkable. The mouth has natural dentition in good repair.

Neck:

The neck is without masses or unusual mobility. The trachea is midline.

Chest, Abdomen, and Back:

The chest and back are symmetric. The abdomen is protuberant.

External Genitalia:

The external genitalia and the anus are unremarkable.

Extremities:

The arms are normally formed. No track marks or ventral wrist scars are noted. The fingernails are short and dirty.

The legs are normally formed and have no edema, amputations, or deformity. The toenails are long, thick, have yellow discoloration, and are dirty. The feet are dirty.

Scars:

1. Multiple (at least 8) irregular, roughly circular scars are scattered on the back and buttocks, ranging 1/2 – 1-3/4 inches diameter

2. A 1-1/4 x 1/8 inch horizontally oriented scar is on the medial right upper arm

3. A 3/4 x 1/2 inch scar is on the medial left elbow

4. A 1 inch long linear scar is on the anterior right ankle

Tattoos:

Monochromatic tattoos are on the head, right upper chest, right upper back, left upper extremity, and bilateral lower extremities.

POSTMORTEM CHANGES

The body is well preserved, cold, and has not been embalmed. Rigidity is moderate in the jaw and extremities. Lividity is pink-purple, fixed, and in a posterior distribution.

EVIDENCE OF MEDICAL INTERVENTION

1. An endotracheal tube is in the mouth, secured by a strap; it terminates in the trachea, superior to the carina

2. A pulse oximeter is on the left earlobe

3. A 5 x 4 inch red ecchymosis is in the skin of the central chest

4. Defibrillator pads (3) are on the right upper chest, left lower chest, and left upper abdomen

5. Electrocardiogram pads (7) are on the chest and upper abdomen

6. The anterior rib arcs of the right 2nd and 3rd and left 2nd – 4th ribs are fractured

7. An approximately 6 cm long, 4 cm deep laceration (near transection) is in the caudate lobe of the liver, associated with an approximately 8 x 8 x 7 cm hepatic contusion

8. Approximately 200 ml of liquid blood is in the peritoneal cavity

9. An intravascular catheter is in the left antecubital fossa

10. A pulse oximeter is on the left third digit

11. Gauze and tape are wrapped around the proximal left lower leg, overlying an intraosseous catheter in the left tibia

EVIDENCE OF INJURY

Superficial Blunt Head Trauma

1. A 3/16 x 1/8 inch red abrasion is on the right cheek

2. A 1 inch long linear superficial linear abrasion is on the left infraorbital cheek

3. No scalp contusions, skull fractures, epidural, subdural, or subarachnoid hemorrhages, or cerebrocortical contusions

Superficial Blunt Torso Trauma

1. A 1 inch diameter faint red-brown ecchymosis is in the skin of the right flank, with associated underlying mild subcutaneous hemorrhage

2. Multiple (at least 5) superficial linear abrasions are on the lower abdomen, ranging 1/8 – 1/4 inch long

3. Two linear abrasions are on the left flank, up to 1/4 inch long

Superficial Blunt Extremity Trauma

1. A 2-1/2 inch long, partially interrupted, healing superficial linear abrasion is on the anterior right forearm

2. Multiple (at least 4) superficial linear abrasions up to 1/8 inch long are on the anteromedial right wrist

3. A 1-1/4 inch diameter red ecchymosis is in the skin of the lateral right wrist

4. An approximately 1 x 3/4 inch vague red ecchymosis is in the skin of the posterior right wrist

5. A 3/4 x 5/16 inch curvilinear band of superficially abraded red ecchymosis is in the skin of the posterior proximal right hand

6. A 1 x 1/4 inch band of red ecchymosis is in the skin of the medial right wrist

7. Two healing superficial linear abrasions are on the posterior right 4th digit, up to 3/4 inch long

8. Multiple (at least 4) superficial linear abrasions are on the anterior left forearm, ranging 1/4 – 3/4 inch long

9. Two focally abraded, faint, vague bands of purple ecchymoses are on the medial left wrist; the most distal band has a central area of pallor

10. A 1/2 x 1/8 inch superficial abrasion is on the posterolateral left wrist

11. Multiple (at least 5) small abrasions are on the posterior left hand, up to 3/16 inch in greatest dimension

12. Multiple (at least 20) superficial linear abrasions are scattered on the right knee and right lower leg, ranging 1/16 – 1/2 inch long

13. Multiple (at least 15) superficial linear abrasions are scattered on the proximal left thigh, left knee, and anterior left lower leg, ranging 1/16 – 1/4 inch long

INTERNAL EXAMINATION

Body cavities:

See "EVIDENCE OF MEDICAL INTERVENTION". The organs are in their expected anatomic position. The serosal surfaces are smooth, glistening, and without adhesions. The diaphragm is intact. There are increased amounts of omental, mesenteric, and retroperitoneal adipose tissue.

Cardiovascular System:

The heart weighs 450 grams and is enlarged. It has a globular shape with a smooth, glistening epicardium. The ostia of the left main and right coronary arteries are patent and positioned normally. The coronary arteries have a normal distribution with right dominance. The coronary arteries have no significant atherosclerotic stenosis and are widely patent.

The myocardium is red-brown, firm, and uniform without focal fibrosis, softening, or hyperemia. The atria and ventricles are mildly dilated. The ventricles are not hypertrophied. The right ventricle, left ventricle, and interventricular septum measure 0.4 cm, 1.2 cm, and 1.4 cm, respectively.

The endocardium is intact, smooth, and glistening. There are no thrombi within the atria or ventricles. The cardiac valve leaflets are of normal number, pliable, intact, and free of vegetations. The atrial and ventricular septa are free of defects.

The aorta is normal in course, caliber, and branch pattern and is without atherosclerotic change or dissection. The ostia of all major branches of the aorta are patent. There are no vascular anomalies or aneurysms. The vena cavae, pulmonary trunk, and pulmonary arteries are without thrombus or embolus.

Respiratory System:

The right and left lungs weigh 690 and 540 grams, respectively, and have the usual lobation. The pleura are smooth and glistening; the lungs have mild anthracotic pigment. The lungs are collapsed and congested. The parenchyma is dark purple and exudes moderate amounts of bloody fluid. The lungs have no consolidation, hemorrhage, infarct, tumor, abscess formation, gross fibrosis, or enlargement of airspaces. The bronchi contain no foreign material and have unremarkable mucosa. Pulmonary thromboemboli are not within any macroscopic branch of the pulmonary arterial vasculature.

Hepatobiliary System:

See "EVIDENCE OF MEDICAL INTERVENTION". The liver weighs 3920 grams and is markedly enlarged. The uninjured capsule is smooth and glistening. The parenchyma is yellow-orange, soft, and uniform without mass or palpable fibrosis.

The gallbladder contains an estimated 50-60 ml of bile and no stones. Its mucosa is uniform, and the wall is not thickened.

The pancreas has a normal size, shape, and lobulated structure. The parenchyma is pink-tan, firm, and uniform.

Hemolymphatic System:

The spleen weighs 130 grams. The capsule is smooth and intact. The parenchyma is dark purple-red, soft, and uniform.

There is no enlargement of the lymph nodes in the neck or body cavities.

The thymus gland is unremarkable.

Endocrine System:

The pituitary gland is not enlarged.

The thyroid gland is not enlarged, and the lobes are symmetrical. The parenchyma is uniform, firm, and red-brown.

The adrenal glands have the usual size and shape. The cortices are thin, uniform, and yellow and there is no hemorrhage or tumor.

Gastrointestinal System:

The esophagus and gastroesophageal junction are unremarkable. The stomach contains approximately 200 ml of dark red-brown fluid without visible pills or pill residue. The gastric and duodenal mucosae are intact and unremarkable. The small and large intestines and appendix are unremarkable to inspection and palpation. The mucosa of the rectum is unremarkable.

Genitourinary System:

The right and left kidneys weigh 180 and 190 grams, respectively, and have a normal shape and position. The cortical surfaces are smooth. The kidneys have the usual corticomedullary structure without tumors, abscesses, or cysts. The pelves and ureters are normal in course and caliber. The renal arteries and veins are patent. The bladder contains 200 ml of clear yellow urine. The mucosa is intact, smooth, and unremarkable. The bladder wall is not hypertrophied.

The prostate gland is of average size and has a homogenous tan parenchyma without nodules or masses. The testes are intrascrotal and have a homogenous tan-brown parenchyma.

Neck:

The strap muscles of the anterior neck and the prevertebral fascia have no masses or ecchymoses. The anterior neck soft tissues have no hemorrhage. The tongue is atraumatic. The hyoid bone and the cartilaginous structures of the larynx and trachea are normally formed and without fracture. The airway is unobstructed, lined by smooth, pink-tan mucosa, and contains no foreign material. The anterior aspects of the cervical vertebrae have no fractures, displacement, hypermobility, or crepitus.

Musculoskeletal System:

See "EVIDENCE OF MEDICAL INTERVENTION". The musculoskeletal system is well developed and free of deformity. The clavicles, sternum, spine, and pelvis have no fractures. The ribs are not brittle. The skeletal muscle is dark red and firm. The extremities do not have palpable fractures.

Head:

The scalp is atraumatic. The bones of the calvarium, base of the skull, and facial skeleton are normally configured and have no fractures or disassociations. The dura is intact and has no masses. The dural venous sinuses are patent. There is no epidural or subdural hemorrhage.

Central Nervous System:

The unfixed brain weighs 1430 grams. The leptomeninges are smooth, glistening, and transparent without underlying hemorrhage or exudate. The superficial cortical vasculature has no thromboses or vascular malformations. The hemispheres are symmetrical and have a normal gyral pattern. The gyri are not flattened and the sulci are not narrowed. There is no midline shift or evidence of herniation. The unci and bilateral cerebellar tonsils are without parenchymal softening, hemorrhage, or necrosis. The arteries at the base of brain have no atherosclerotic changes or aneurysms. The cranial nerve roots are symmetric and normally distributed.

The cortical ribbon is intact and is without contusion. The gray-white matter junctions are distinct. The internal capsules, ventricular system, deep gray nuclei, hippocampi, mammillary bodies, superior cerebellar vermis, cerebellar parenchyma, brainstem, and proximal cervical spinal cord are of normal configuration. The substantia nigra and locus ceruleus are normally pigmented. The brain parenchyma is without neoplasm, cyst, abscess, or hemorrhage. The cerebrospinal fluid is clear.

MICROSCOPIC EVALUATION

Tissues are submitted for histologic evaluation (unless otherwise specified, the tissues are only stained with H&E).

Cassette Summary:

1. Left lung
2. Right lung
3. Liver; kidney
4. Left ventricle, posterior wall
5. Left ventricle, anterior wall
6. Left ventricle, lateral wall
7. Right ventricle
8. Interventricular septum
9. Frontal border zone
10. Basal ganglia
11. Hippocampus
12. Pons
13. Cerebellum

Microscopic Description:

Brain:

The cortical ribbon, basal ganglia, hippocampus, pons, and cerebellum are normally configured. Some of the neurons are slightly hyperchromatic and hypereosinophilic; rare neurons are also shrunken, hyperangulated, and have pyknotic nuclei. Blood vessels within the putamen are congested, associated with minimal extravasated blood. Alzheimer type II astrocytes (enlarged, naked nuclei with peripherally marginated chromatin) are scattered in the putamen. Vascular congestion is prominent in the pons and cerebellum.

Heart:

The basic cardiac architecture is retained. Many of the myocytes are hypertrophic with enlarged nuclei. The myocardium is without inflammation, necrosis, fibrosis, or hemorrhage.

Lungs:

The basic pulmonary architecture is retained. Vascular congestion is prominent; intra-alveolar extravasation of blood is patchy. Many of the alveoli contain edema fluid; some contain macrophages. Many of the larger airways contain sloughed epithelial cells, erythrocytes, and mucous. Many of the blood vessels contain optically clear vacuoles displacing erythrocytes. No polarizable debris.

Liver:

Macro- and microvesicular steatosis is severe and diffuse. The portal tracts are unremarkable. No fibrosis, lobulitis, or interface hepatitis.

Kidney:

The basic renal architecture is retained. Autolysis is mild. Rare glomeruli are globally sclerotic. Medullary vascular congestion is prominent. No other significant histopathologic abnormalities.

SPECIMENS & EVIDENCE RETAINED

Toxicology:

The following samples are retained:

- Peripheral blood
- Central blood
- Ocular fluid
- Urine
- Liver
- Bile
- Gastric contents

Tissue:

Samples of each examined organ / organ system are retained in formalin.

Photographs:

Facial identification, external overall, and photographs of selected findings are produced during the course of autopsy.

I have reviewed the autopsy photographs and I affirm that they accurately represent the body and autopsy findings as they were presented to me at the time I examined the remains.

Radiographs:

Full-body radiographs are obtained over 32 plates and show no obvious osseous pathology or trauma, aside from rib fractures described above.

Evidence:

The following items are retained in evidence:

- Gunshot residue swabs
- Fingernail clippings
- DNA card
- Head hair
- Clothing
- Fingerprints

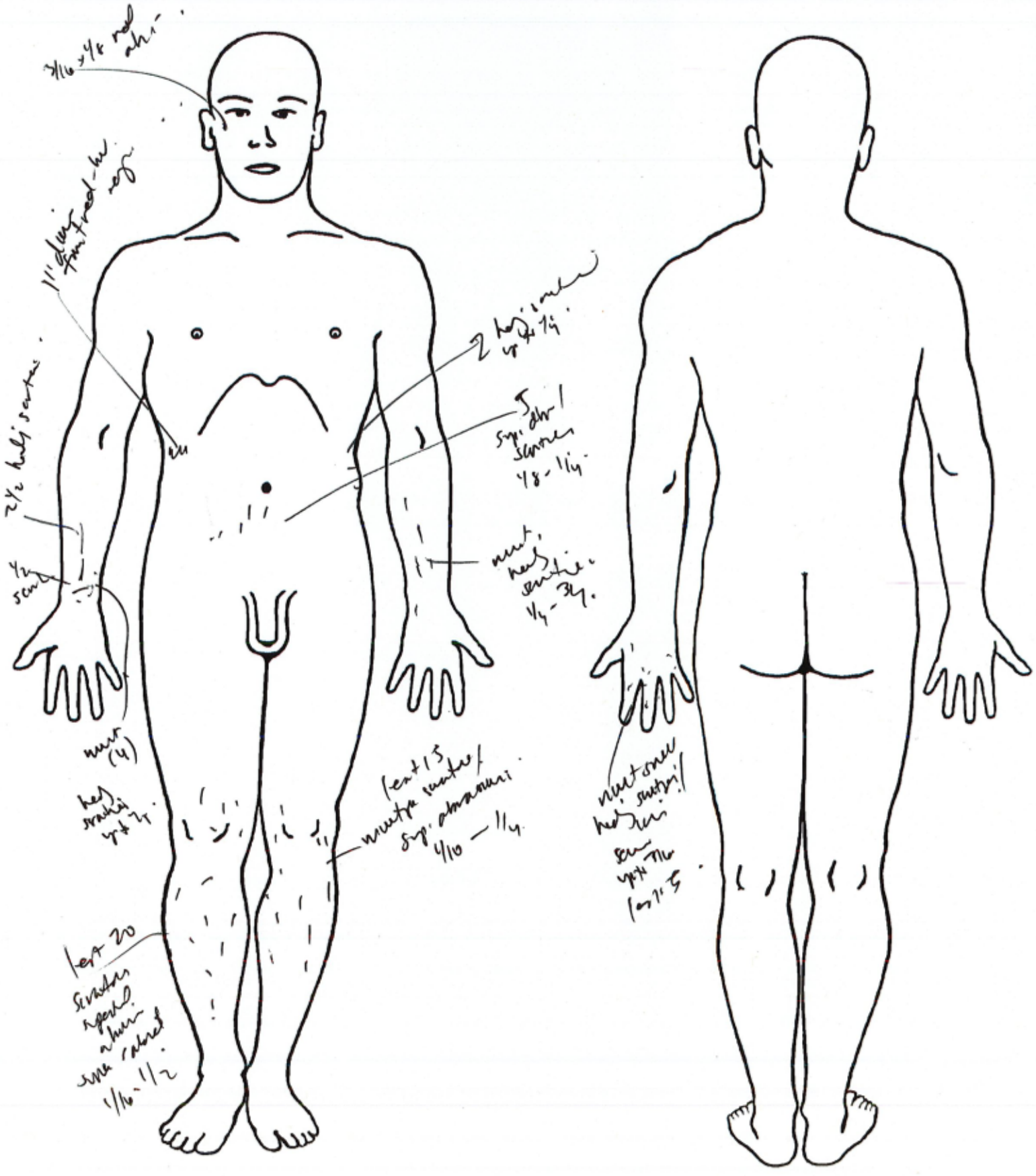
Alameda Co. Sheriff's Office-Coroner's Bureau

Alameda County
CORONER'S BUREAU

2021-02197 4/21/2021

GONZALEZ ARENALES MARIO

187



Alameda Co. Sheriff's Office-Coroner's Bureau

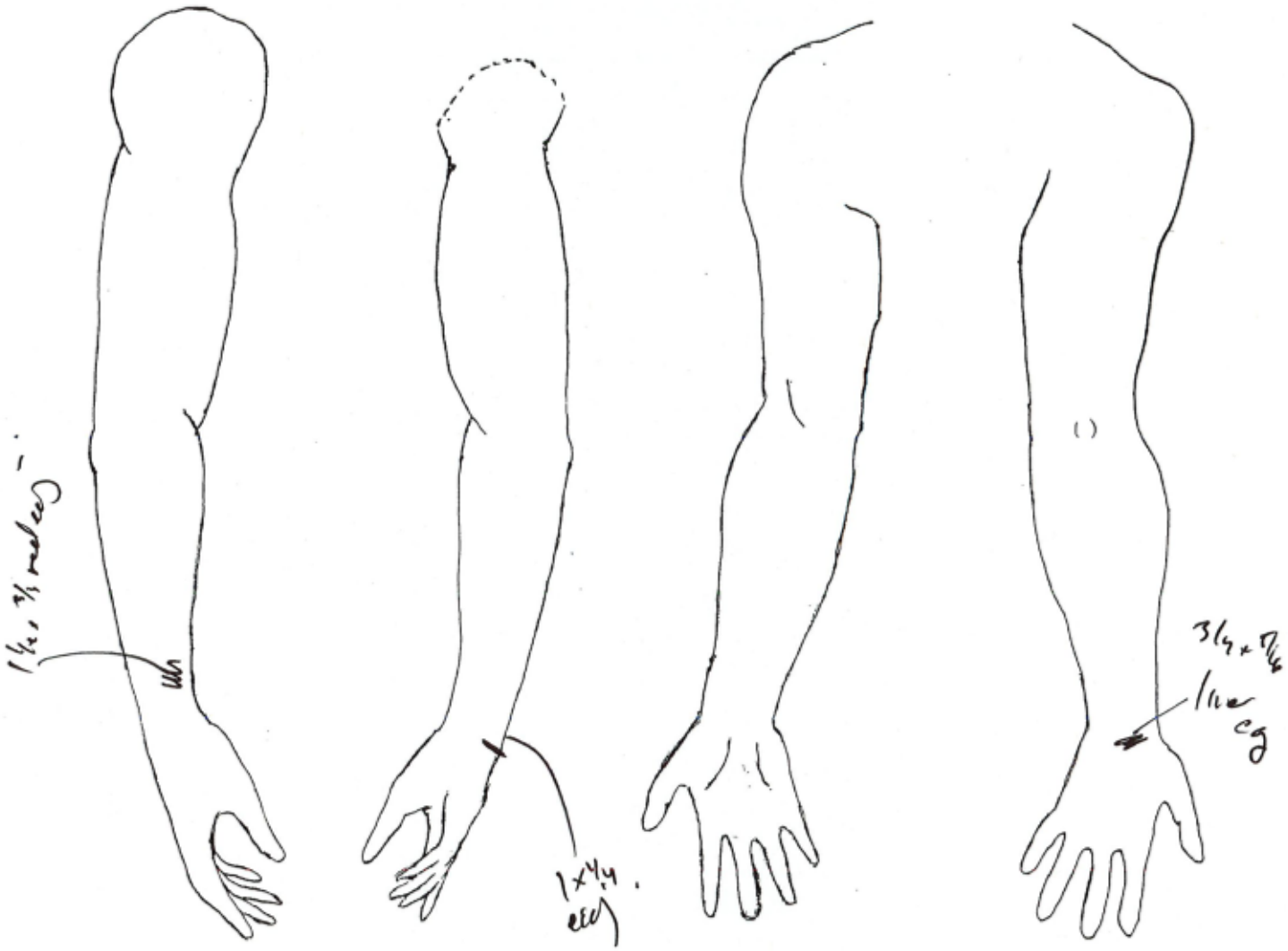
Alameda County
CORONER'S BUREAU

2021-02197 4/21/2021

GONZALEZ ARENALES MARIO

187

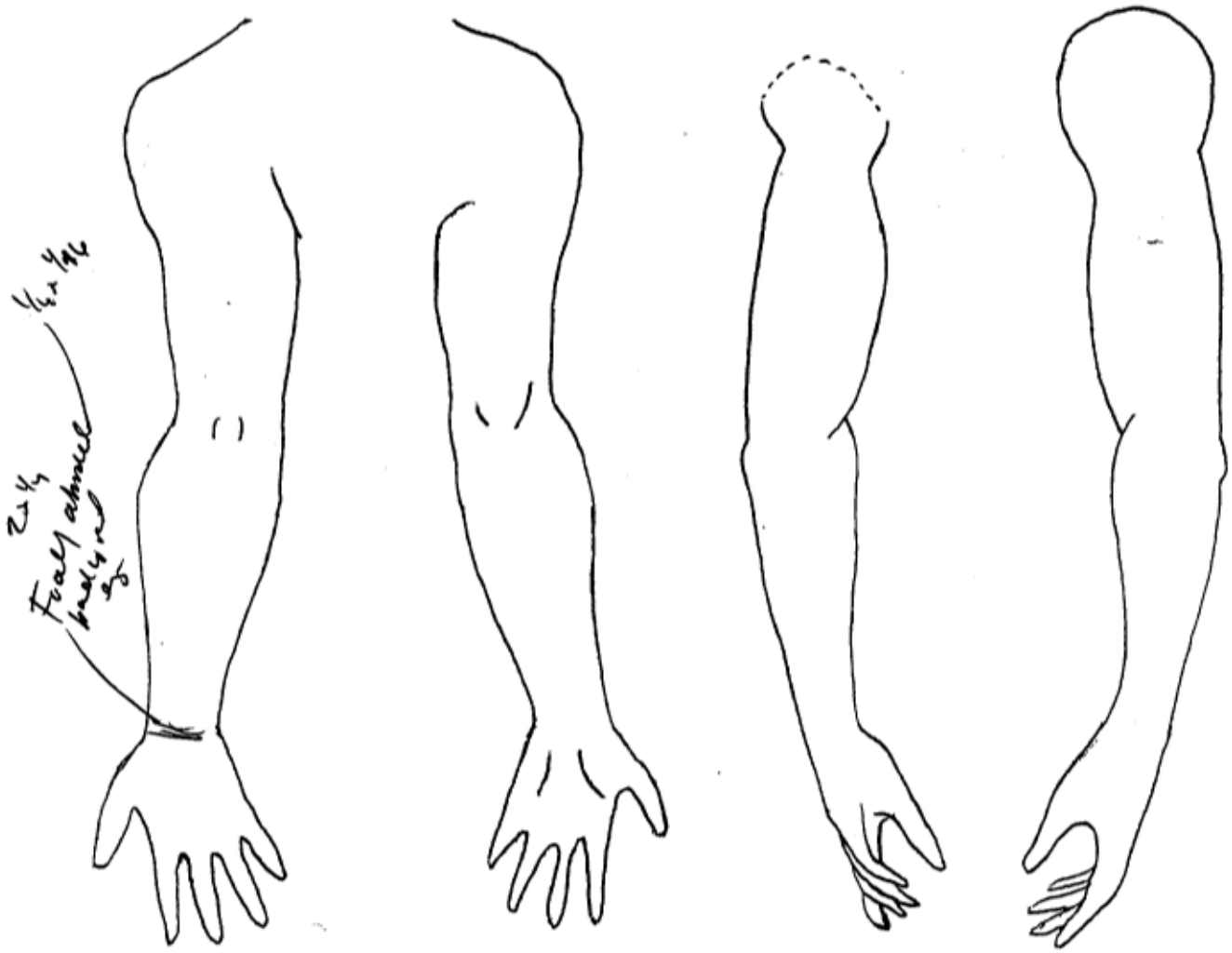
Right Upper Extremity



Alameda County
CORONER'S BUREAU

NAME GONZALEZ ARENALES
CASE # 2021-02197

Left Upper Extremity



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Alameda Co. Sheriff's Office-Coroner's Bureau
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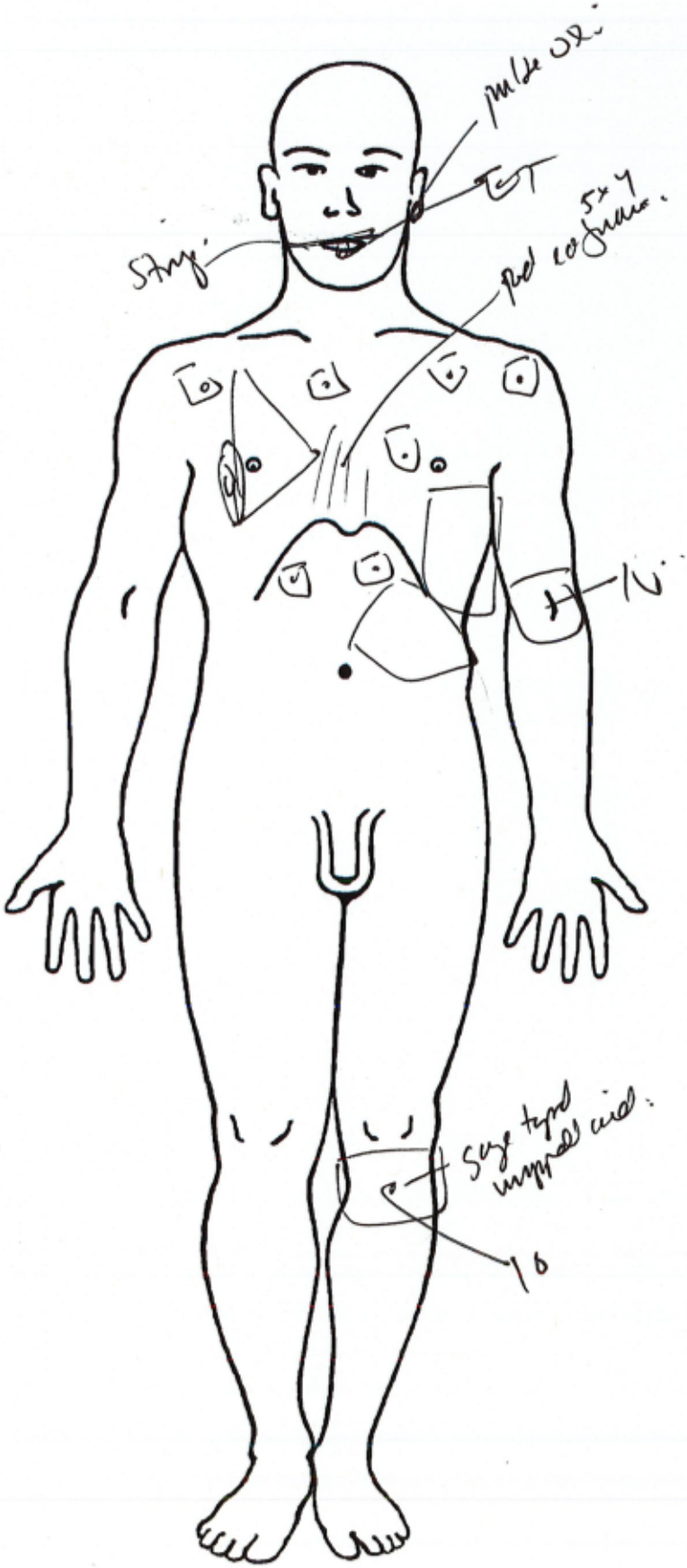
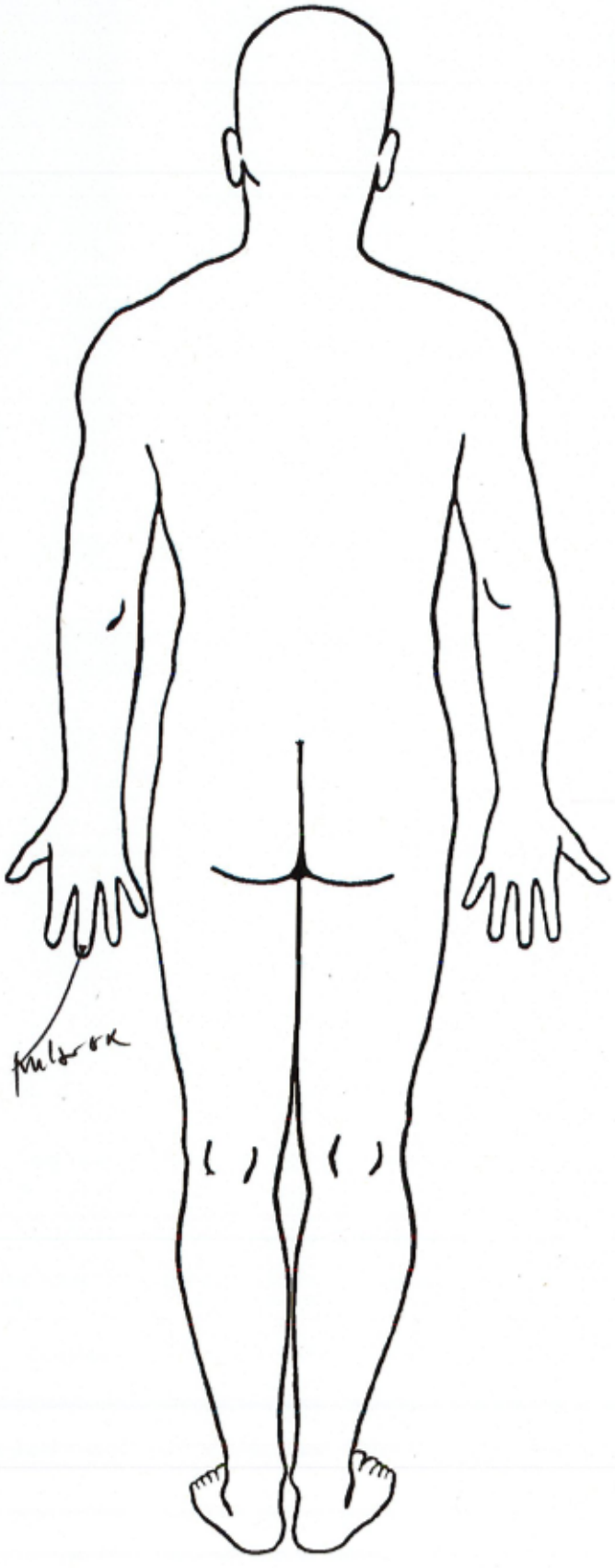
GONZALEZ ARENALES MARIO
187





ASCERTAIN™
FORENSICS

ASCERTAIN FORENSICS AT REDWOOD TOXICOLOGY LABORATORY

3650 Westwind Blvd. Santa Rosa, CA 95403
Phone FAX 707-703-1319

Agency # 2021-02197

FORENSIC LABORATORY REPORT

AF # 2021-001683

To: Chief Pathologist Vivian Snyder

Alameda Co. Sheriff's Ofc - Coroner's Bureau

Sample Collection Date: April 21, 2021

Decedent: Mario Gonzalez Arenales

The following evidence was submitted to the Laboratory by a representative of the Alameda Co. Sheriff's Ofc - Coroner's Bureau on 4/27/2021 via Courier:

Submission 01: One sealed plastic bag with one container of blood. Attached paper work marked in part "Gonzalez Arenales, Mario".

Item # 01-A: One red screw cap container with approximately 35 mL of femoral blood.

The following evidence was submitted to the Laboratory by a representative of the Alameda Co. Sheriff's Ofc - Coroner's Bureau on 5/11/2021 via FedEx:

Submission 02: One adhesive sealed plastic bag with one tube of vitreous fluid. Attached paperwork marked in part "Gonzalez Arenales, Mario".

Item # 02-A: One red top tube with approximately 7 mL of vitreous fluid.

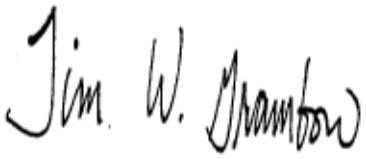
Service Request:

FP759X - Vitreous Panel - Vit

Confirmation/Screen Results

Analyte Name	Concentration	Method	Sample Type
Sodium	140 mEq/L	Abbott i-STAT	Vitreous Fld
Potassium	> 9.0 mEq/L	Abbott i-STAT	Vitreous Fld
Chloride	120 mEq/L	Abbott i-STAT	Vitreous Fld
Glucose	< 20 mg/dL	Abbott i-STAT	Vitreous Fld
Urea Nitrogen	22 mg/dL	Abbott i-STAT	Vitreous Fld
Creatinine	0.9 mg/dL	Abbott i-STAT	Vitreous Fld

Respectfully,



Tim W. Grambow, F-ABFT
Senior Forensic Toxicologist

Date of Report: May 17, 2021

Ascertain Forensics at Redwood Toxicology is accredited by The American Board of Forensic Toxicology (ABFT) and is recognized by the State of California as a Title 17 Forensic Alcohol Laboratory.

All samples, including the sample packaging, will be retained at the laboratory for one year after the date of report. After one year, the samples and packaging will be destroyed unless the client requests that the samples be returned or an alternate retention policy has been set up with the laboratory. The laboratory cannot ship controlled substances.

Comments

None

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Item # 01-A: One red screw cap container with approximately 35 mL of femoral blood.

Service Request:

FP222B - Expanded Pnl (Confirm) - Blood

ASCERTAIN™
FORENSICS

2021-001683-0001

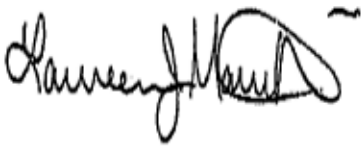
Drug Screen Results - ELISA

Drug Screen Classification	Result	Limit of Detection
Amphetamine \ MDA	Positive	20.0 ng/mL
Barbiturates	Not Detected	1.0 mcg/mL
Benzodiazepines	Not Detected	25.0 ng/mL
Buprenorphine	Not Detected	1.0 ng/mL
Carisoprodol	Not Detected	500.0 ng/mL
Cocaine Metabolite	Not Detected	50.0 ng/mL
Fentanyl	Not Detected	1.0 ng/mL
Marijuana Metabolite	Not Detected	10.0 ng/mL
Methadone	Not Detected	25.0 ng/mL
Methamphetamine \ MDMA	Positive	20.0 ng/mL
Opiates	Not Detected	10.0 ng/mL
Oxycodone \ Oxymorphone	Not Detected	5.0 ng/mL
PCP	Not Detected	5.0 ng/mL
Tramadol	Not Detected	50.0 ng/mL
Zolpidem	Not Detected	5.0 ng/mL

Confirmation/Screen Results

Analyte Name	Concentration	Method	Sample Type
Methamphetamine	907 ng/mL	GC-MS	Blood
Amphetamine	134 ng/mL	GC-MS	Blood
Naloxone	50 ng/mL	LC-MS-MS	Blood
Methamphetamine	Positive	LC-MS-MS	Blood
Ethanol	< 0.02 grams %	GC-Headspace	Blood
Acetone, IPA and MeOH	Not Detected	GC-Headspace	Blood

Respectfully,



Laureen J. Marinetti, Ph.D.,F-ABFT
Laboratory Head

Date of Report: May 6, 2021

Ascertain Forensics at Redwood Toxicology is accredited by The American Board of Forensic Toxicology (ABFT) and is recognized by the State of California as a Title 17 Forensic Alcohol Laboratory.

All samples, including the sample packaging, will be retained at the laboratory for one year after the date of report. After one year, the samples and packaging will be destroyed unless the client requests that the samples be returned or an alternate retention policy has been set up with the laboratory. The laboratory cannot ship controlled substances.

Comments

IPA - isopropanol, MeOH - methanol