

GLENN N. WAGNER, D.O. CHIEF MEDICAL EXAMINER

County of San Diego

CHRISTINA STANLEY, M.D. CHIEF DEPUTY MEDICAL EXAMINER

OFFICE OF THE MEDICAL EXAMINER 5555 OVERLAND AVE., SUITE 1411, SAN DIEGO. CALIFORNIA 92123-1245

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INVESTIGATIVE REPORT 3/19/2005 CASE NUMBER NAME OF DECEASED (LAST, FIRST MIDDLE) HIO INFO ~ 05-00171 REPORTED BY REPORTING AGENCY PAID AUTOPSY INVESTIGATOR CALL Husband **V** Julio Estrada CALL DATE AND TIME ARRIVAL DATE AND TIME RETURN DATE AND TIME 01/25/2005 1119 DATE AND TIME OF DEATH DATE OF BIRTH AGE GENDER RACE **ECEDENT** 01/21/2005 1950 01/02/1957 Female White 48 Years TELEPHONE NO. RESIDENCE (STREET, CITY, STATE, ZIP COUNTY Butte SOCIAL SECURITY NO. CITIZENSHIP OCCUPATION **USA** Retired Nurse TYPE OF PLACE LOCATION OF DEATH Found, Rehabilitation Center (In Rosarito Mexico) Other ADDRESS (STREET, CITY, STATE, ZIP) Unknown FND/PRN AGENCY Found SUMMARY DEATH Kelly Grunder was a married 48-year-old Caucasian female who lived with his family in Chico California. She was a retired nurse who was diagnosed with fibromyalgia three years ago. Her symptoms included pain on her legs for which she was prescribed with Vicodin. Approximately 8 months ago, she underwent a gastric bypass surgery resulting in a total weight loss of 150-180 pounds of her 300 pounds weight. This loss of weight reduced her leg pain to a minimum and she considered that she no longer needed to use Vicodin. During a World Wide Web search, she found information on a new treatment with a non-approved FDA medication only prescribed in Mexico and she traveled to Rosarito, Baja California to receive a "detoxification" treatment at a rehabilitation center. Five days after her admission, personnel at this center found her unresponsive and not breathing and she was confirmed expired under unknown circumstances. Other than the fibromyalgia, the recent gastric bypass surgery and the use of her medications, her medical history is remarkable only for a hysterectomy performed several years LOCATION OF INCIDENT INCIDENT PLACE TYPE AT WORK AT RESIDENCE COUNTY ADDRESS (STREET, CITY, STATE, ZIP) NCIDENT DATE AND TIME OF INCIDENT INVESTIGATING AGENCY OFFICER BADGE # REPORT # **DECEDENT WAS** BELTED HELMETED POSITION ON PRIVATE PROPERTY \sqcup No Yes
 Yes
 ✓ \sqcup_{No} LICENSE NUMBER STATE VEHICLE METHOD DATE AND TIME IDENTIFIED BY Visual 01/25/2005 0000 Aztlan Funeraria TYPE OF EXAM PROPERTY PUBLIC ADMINISTRATOR FUNERAL HOME NOTIFICATION ✓ No ✓ No Yes
 Yes
 ✓ ☐ Yes Autopsy Aztlan Funeraria NAME OF NOK OR OTHER RELATIONSHIP TELEPHONE NO. DATE NOTIFIED NOTIFIED BY Husband 1/20/2005 Other TELEPHONE NO. DATE NOTIFIED NOTIFIED BY NAME OF NOK OR OTHER RELATIONSHIP

1/20/2005

Other

Son

San Diego Medical Examiner 5555 Overland Avenue, Ste 1411 San Diego, CA 92123 (858) 694-2895 Case Number Investigator Date of Death Date Today : 05-00171 : Julio Estrada : 01/21/2005 : 03/19/2005

INVESTIGATIVE NARRATIVE

Decedent:

Antemortem Events:

The following information was obtained during a combined personal interview with and and and adult son on 01/25/20054 at 1030 hours: The decedent on her own will, decided to seek treatment to cease the use of her prescribed Vicodin at a detoxification center in Mexico. According to her family, she never abused the medication and she just wanted to "get off of it" since in her opinion, she no longer needed it.

On Monday 01/17/2005, the decedent arrived to Ibogaine Detoxification Center in Rosarito Baja California, Mexico and during an initial assessment she was reportedly found hypotensive. She was placed in observation and once her blood pressure stabilized, she was formally admitted on Tuesday 01/18/2005. In the following days, the decedent telephoned her family frequently and stated that she felt as if she was having the "most wonderful experience" at the center and that the place was a "real hug factory". She expressed no new symptoms or complaints.

On Friday 01/20/2005, the decedent's family received a phone call from the center informing them that she had been found dead in bed with no further detailed explanations. The decedent was taken to a funeral home and a doctor at the center signed a death certificate with a currently unknown cause of death.

Days later, the decedent's family was able to bring the decedent's body across the border from Mexico and contacted this office for a family paid autopsy.

Past Medical History and Surgery:

The following information was obtained during a combined personal interview with and and and adult son on 01/25/20054 at 1030 hours: The decedent began to gain weight after his first child was born, at one time, she weight over 300 pounds. Approximately three years ago, she developed pain on her legs and she was diagnosed with fibromyalgia. Her treatment included up to 12 doses of Tylenol with Vicodin a day. Approximately eight months ago, she underwent a gastric bypass to loose weight and in this period of time, she lost half of her weight. Other medical history includes a hysterectomy in the past reportedly for "excessive bleeding" and arthritis and reportedly a chronic "lower rate heartbeat".

Medical Intervention and Hospitalization:

Not applicable.

Body and Scene Description:

This investigation was handled in office; the decedent's body was not viewed by the undersigned.

Special Requests:

This is a family paid autopsy.

Identification:

The decedent's body was visually identified by her family to funeral personnel.

Tissue Donation:

Comment:

These results would be consistent with the use of diazepam and ibogaine.

Approved and Signed: 03/04/2005

05-00171

Iain M. McIntyre, Ph.D.

Forensic Toxicology Laboratory Manager

Reviewed:

Catherine E. Hamm

Toxicologist III

| • |
|---|
| Antemortem Blood: Not applicable to this investigation. |
| Public Administrator: No referral needed. |
| Other Important Factors: Information found on the Internet indicate that Ibogaine, the substance used to treat the decedent in Mexico is a compound obtained from the root of a shrub found in West Africa which had hallucinogenic properties and is illegal to use in the United States. An addict while experimenting with new drugs initially discovered it. It is believed to help pharmaco-dependent people leave their addictions including alcohol addiction. Signed: |
| Julio Estrada |

Not pursued.



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AUTOPSY REPORT

Name of deceased:

ME#: 05-0171

Place of residence:

CHICO, CA 95973

Age: 48 YEARS

Place of death:

REHABILITATION CENTER

Sex: FEMALE

ROSARITO, MX

Date and time of death:

FOUND,

JANUARY 21, 2005; 1950 HOURS

Date and time of autopsy:

JANUARY 27, 2005; 0930 HOURS

CAUSE OF DEATH:

SUDDEN CARDIAC DEATH

Due to:

ACUTE MYOCARDIAL INFARCT

Due to:

ACUTE CORONARY SYNDROME

Contributory:

FIBROMYALGIA; CHRONIC PAIN MEDICATION

DEPENDENCY

MANNER OF DEATH:

NATURAL

AUTOPSY SUMMARY:

I. History of morbid obesity (body weight>300 pounds).

A. Status post gastric by-pass surgery, 8 months.

B. Current weight, 166 pounds.

II. History of fibromyalgia and leg pain, treated.

III. History of total hysterectomy, no sequelae.

IV. Acute pulmonary congestion and edema: right lung, 600

grams; left lung, 550 grams.

V. Dilated cardiomyopathy.

A. History of hypotensive episodes.

- B. Biventricular dilatation.
- C. Acute myocardial infarct

VI. Toxicology: Positive for ibogaine, diazepam, oxazepam, and temazepam.

CIRCUMSTANCES OF DEATH: This 48 year old white female, married, a resident of Chico, CA was undergoing detoxication treatment in Rosarito, Mexico with ibogaine for vicodin dependency. The vicodin dependency reportedly was the result of three years of fibromyalgia and leg pain and the need for chronic pain medication. Mrs. also suffered from morbid obesity and at the time of her scheduled gastric by-pass surgery was approximately 300 pounds. She was 166 pounds at the time of her death eight months later. According to the investigator's report, the decedent was in her fifth day of treatment and was found dead in bed in residence. This examination is a family requested investigation.

An autopsy was performed on 27 January 2005 and documented the above findings. Microscopic studies are collaborative and document an evolving myocardial infarct. Toxicology studies are positive for ibogaine (blood, 0.82 mg/L; liver, 0.72 mg/kg), ibogamine (blood, detected), diazepam (blood, 0.06 mg/L), nordiazepam (blood, 0.39 mg/L), oxazepam (blood, 0.08 mg/L) and temazepam (blood, trace). Toxicology studies are negative for volatiles, drugs of abuse other than benzodiazepines, and a base screen exclusive of ibogaine, diazepam and their metabolites.

Based on these findings and the history and circumstances of the death as currently known, the cause of death is best listed as sudden cardiac death due to acute myocardial infarct and the manner of death as natural.

CLENN N. WAGNER, D.O. Chief Medical Examiner

Date signed: 3/14/05

<u>IDENTIFICATION</u>: The body is identified by a blue Medical Examiner's tag around the right ankle bearing the decedent's name and case number.

ASSISTANT: Forensic Autopsy Assistant: Steven Hannum.

<u>CLOTHING AND PERSONAL EFFECTS</u>: The following clothing items and personal effects are present on the body at the time of autopsy:

1. Teal blue top and bottom casual attire.

MEDICAL INTERVENTION:

1. None.

EXTERNAL DESCRIPTION

The body is of a well-developed, well-nourished, somewhat overweight adult white female appearing 64 inches tall, 166 pounds whose appearance is consistent with the reported age of 48 years. Lividity is minimal, posterior and fixed. Rigor is absent, and the temperature is cool following refrigeration. The skin shows no evidence of trauma. There is no evidence of jaundice, carotenemia, hyper or hypopigmentation. There are no tattoos.

The head is normocephalic. The scalp is covered with relatively long brown hair in a normal distribution. The face is symmetrical. The irides are brown and the pupils round and equal. The sclera and conjunctiva are clear. No petechiae are present. The external auditory canals are patent. The ears are normally shaped, creased and pierced. The nares are patent, and the lips are atraumatic. The nose and maxillae are palpably stable. The dentition is natural in fair repair. The buccal mucosa is free of trauma. The tongue is unremarkable.

The neck is straight without crepitus or hypermobility, and the trachea is midline and mobile. There is no cervical, axillary or inguinal lymphadenopathy. The neck veins are not distended. The chest is symmetric. The breasts are free of masses and unremarkable. The abdomen is protuberant but soft. There is no abdominal wall retraction, hernias, abnormal veins, or discoloration. There are two small well healed linear horizontal surgical scars. Numerous abdominal striae are present. The genitalia are those of a normal adult female. Brown pubic hair is present in a normal distribution. The back, buttocks and anus are unremarkable. There is no spinal deformity. There are no other identified surgical scars.

The upper and lower extremities are symmetric, normally developed, and without clubbing or edema, old or recent non-medical needle marks, cut-down incisions, gangrene, ulcers, tumors, or digital

clubbing. The wrists show no injury. The finger and toe-nails are trimmed and unremarkable. No trauma is present.

EVIDENCE OF INJURY

None noted.

INTERNAL EXAMINATION

HEAD: The galeal and subgaleal soft tissues of the scalp are free of injury. The calvarium is intact, as is the dura mater beneath it. The calvarium measures 3/8 inch. The dura is unremarkable in thickness, color and transparency. No calcification is present. There is no epidural, subdural or subarachnoid hemorrhage. Clear cerebrospinal fluid surrounds the 1450 gram congested symmetrical brain, which has unremarkable gyri and sulci. The leptomeninges are clear. There is diffuse cortical softening. There is no uncal or tonsillar grooving or herniation. The cranial nerves are unremarkable. The circle of Willis shows mild to moderate nonocclusive atherosclerosis. There is no evidence of thrombosis, aneurysm or other anomalies. Coronal sections demonstrate sharp demarcation between white and gray matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum, and arterial systems are free of injury of other abnormalities. There are no skull base or facial fractures. The atlanto-occipital joint is stable. The cervical spinal cord is unremarkable.

NECK: The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage. The thyroid cartilage and hyoid are intact. The larynx is lined by intact white mucosa. The larynx, epiglottis and trachea are unremarkable without evidence of edema, inflammation, obstruction, deviation, or compression. The 30 gram thyroid is symmetric and red-brown, without cystic or nodular change. The parathyroids are identified. The thymus is atrophic. The tongue is free of bite marks, hemorrhage, or other injuries.

BODY CAVITIES: The ribs, sternum, and vertebral bodies are visibly and palpably intact. The vertebral column shows no abnormal curves, vertebral collapse, unusual density or evidence of tumor infiltration. No excess fluid is in the pleural, pericardial, or peritoneal cavities. The organs occupy their usual anatomic positions. The abdominal panniculus measures 2 inches.

MUSCULOSKELETAL SYSTEM: The axial and appendicular skeleton is unremarkable in development, symmetry, and density. There are no spinal deformities. The joints show no abnormality. The

extremities show no evidence of vascular disease, gangrene, edema, or ulceration. The muscles likewise are normally developed and show no abnormality.

RESPIRATORY SYSTEM: The right and left lungs weigh 600 and 550 grams, respectively. Both lungs have a normal configuration and are fully expanded. The external surfaces are smooth and deep red-purple. The sectioned pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present. The pulmonary vasculature is free of thrombi and unremarkable. The upper airways are unobstructed and free of trauma. The diaphragm is unremarkable. The pleural cavities show no old or recent injury. There is a moderate amount of anthracotic pigment in the visceral pleura.

The dilated globoid flabby 400 gram heart CARDIOVASCULAR SYSTEM: is contained in an intact pericardial sac. The epicardial surface is smooth, with moderate fat investment. The coronary arteries arise normally and are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show mild to moderate non-occlusive atherosclerosis. No acute thrombus is The myocardium is homogeneous, red-brown, and firm. The sectioned myocardium shows no discrete areas of hemorrhage, pallor There is biventricular dilatation. There is no or fibrosis. septal defect. The valve leaflets are thin and mobile. The valve circumferences are unremarkable. The walls of the left and right ventricles are 1.2 and 0.3 cm thick, respectively. The septum measures 1.0 cm. The endocardium is smooth and glistening. aorta gives rise to three intact and patent arch vessels. There is minimal atherosclerosis. The renal and mesenteric vessels are unremarkable as are the great veins

LIVER AND BILIARY SYSTEM: The 2460 gram liver has an intact, smooth capsule and a sharp anterior border. The sectioned parenchyma is red-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The dilated gallbladder contains 10 cc's of green-black viscous bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN: The 400 gram spleen has a smooth, intact, red-purple capsule. There is no opacity, wrinkling, capsular thickening, or lobulation. The sectioned parenchyma is maroon and congested, with distinct Malpighian corpuscles. There are no accessory spleens. The splenic artery is unremarkable.

<u>PANCREAS</u>: The 200 gram pancreas is firm and yellow-tan, with the usual lobular architecture and a normal consistency. No mass lesions or other abnormalities are seen.

<u>ADRENALS</u>: The right and left adrenal glands are symmetric, with bright yellow cortices and gray medullae. They have a normal size and shape. No masses or areas of hemorrhage are identified.

GENITOURINARY SYSTEM: The right and left kidneys weigh 150 and 165 grams, respectively. Both kidneys have a normal configuration and location. No trauma is present. The external surfaces of each are intact and smooth. There is no scarring, pitting, abscesses or hemorrhage. The cut surfaces of each are red-tan and congested, with uniformly thick cortices and sharp corticomedullary junctions. The pelves are unremarkable and the ureters are normal in course and caliber. White bladder mucosa overlies an intact bladder wall. The bladder is empty. The trigone is unremarkable in color and ostia patency. The vagina is free of trauma. The cervix, uterus, ovaries and fallopian tubes are surgically absent.

GASTROINTESTINAL TRACT: The esophagus is intact and lined by smooth, gray-white mucosa. The plicated stomach contains approximately 20 cc of brown fluid without identifiable food particles. No pills, tablets or capsules are identified. The gastric wall is intact and the mucosa unremarkable. The esophageal and duodenal outlets are normal. The duodenum, distal loops of small bowel, and colon are unremarkable. The distal small intestine shows a surgically created "Y" anastomosis with the stomach. The appendix is present and normal appearing. The mesentery is free of trauma and unremarkable.

SPECIMENS

<u>TOXICOLOGY</u>: Specimens retained for toxicology testing are: vitreous, central and peripheral blood, bile, gastric contents, liver, kidney, spleen and brain.

<u>HISTOLOGY</u>: Selected portions of organs are retained in formalin without preparation of histologic slides. Specimens are taken for microscopic histologic examination.

PHOTOGRAPHS: Documentary photographs are taken by MEO.

RADIOGRAPHS: None taken.

<u>CLOTHING AND PERSONAL EFFECTS:</u> Personal effects are released to the appropriate mortuary operations representatives.

ORGAN DISPOSITION: The dissected organs are forwarded with the body.

MICROSCOPIC EXAMINATION

Tissues selected for microscopic histologic examination are represented in 24 slides:

1/2/3/4-heart-myocardium

5-heart-coronary arteries

6/7/8/9-lungs

10-liver

11-kidneys

12-adrenal glands

13-spleen

14-pancreas

15-pituitary/thyroid glands

16-mesentery

17-stomach

18-bone marrow

19/20/21/22/23/24-brain

<u>HEART</u>: Sections of the heart show acute congestion, interstitial edema, diffuse myocyte ischemic changes and focal intramuscular hemorrhage. There is no evidence of myocarditis, endocarditis, vasculitis. thrombi, granulomata, tumor or other infiltrative process. Sections of coronary arteries show mild to moderate non-occlusive atherosclerosis. No thrombus is noted.

THYROID: Section of thyroid shows normal glandular structures with stromal chronic inflammation. There is no hemorrhage, fibrosis, necrosis, atrophy, hyperplasia or tumor.

<u>LIVER</u>: Section of liver shows acute congestion without hemorrhage, inflammation, infection, fatty change, bile stasis, necrosis, tumor or other infiltrative process.

<u>PANCREAS</u>: Section of pancreas shows generalized autolysis with overall preservation of architecture without evidence of hemorrhage, inflammation, fibrosis or tumor.

STOMACH: Section of stomach shows mild mucosal congestion without evidence of hemorrhage, ulceration, infection or tumor.

<u>LUNGS</u>: Sections of lung show acute congestion and edema, patchy chronic inflammation, intra-alveolar hemorrhage, and interstitial and pleural anthracosis. There is no evidence of pneumonia, aspiration, hemorrhage, granulomata, thrombi, fibrosis, tumor or other infiltrative process.

<u>SPLEEN</u>: Section of spleen shows acute congestion without hemorrhage, infection, infarct, fibrosis, tumor or other infiltrative process.

BONE MARROW: Section of bone marrow shows normal trabecular bone with a normocellular marrow and no evidence of hemorrhage, infection, fibrosis, necrosis or tumor. There is normal maturation of all cell lines.

<u>KIDNEYS</u>: Sections of kidney show acute congestion and no evidence of trauma, infection, inflammation, necrosis, tumor or other infiltrative process.

ADRENAL GLAND: Sections of adrenal gland show a normal histology without hemorrhage, inflammation, necrosis, fibrosis, atrophy, hyperplasia or tumor.

<u>PITUITARY GLAND:</u> Section of pituitary shows a normal histology without trauma, infection or tumor.

BRAIN: Sections of brain include cortex, midbrain, cerebellum and brainstem. All sections show acute congestion and edema. There is no evidence of hemorrhage, infection, inflammation, necrosis, tumor or other infiltrative process.

GNW:jc

D: 1/27/05 T: 1/28/05

Rev. 3/14/05 clb



County of San Miego

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TOXICOLOGY REPORT

Name:

Medical Examiner Number:

05-00171

Date of Death:

01/21/2005

Pathologist:

Glenn N. Wagner, D.O.

JΕ

Specimens Received:

Bile, Blood, Brain, Central Blood, Gastric, Kidney, Liver, Peripheral Blood,

Spleen, Vitreous

| Test Name (Method of Analysis) | Specimen Tested | Result |
|--|---------------------------|---|
| Alcohol Analysis (GC) Alcohol (Ethanol) Acetone, Methanol, Isopropanol | Peripheral Blood | Not Detected Not Detected |
| Drugs of Abuse Screen (ELISA) Cocaine metabolites Opiates Amphetamines Benzodiazepines Fentanyl Cannabinoids | Central Blood | Not Detected Not Detected Not Detected Presumptive Positive Not Detected Not Detected |
| Base Screen (GC/MS) Ibogaine Ibogamine Diazepam Nordiazepam | Peripheral Blood | Detected Detected Detected Detected |
| Benzodiazepines (HPLC-DAD) Diazepam Nordiazepam Oxazepam Temazepam | Peripheral Blood | 0.06 mg/L 0.39 mg/L 0.08 mg/L Trace Detected (<0.05 mg/L) |
| Ibogaine (GC/MS) | Peripheral Blood Liver | 0.82 mg/L 0.72 mg/kg |