

CLINICAL RECORD		AUTOPSY PROTOCOL			
DATE AND HOUR DIED 18 November 1978		A. M. P. M.	DATE AND HOUR AUTOPSY PERFORMED 15 December 1978		A. M. P. M.
PROSECTOR Douglas S. Dixon, MAJ, MC, USA		ASSISTANT Joseph M. Ballo, LTC, MC, USA		CHECK ONE	
				FULL AUTOPSY	HEAD ONLY
				X	

CLINICAL DIAGNOSES (Including operations)

This body (later identified as William Richard Castillo) was one of a large number of bodies discovered at Jonestown, Guyana on or about 19 November 1978 by members of the Guyanese Defense Force. The scene, as reported in various news media and by government officials of Guyana, was said to be grotesque in the extreme. A few witnesses, again reported in various news media, said that most of these people, some willingly and others unwillingly, had ingested poison(s) which fairly quickly led to their deaths.


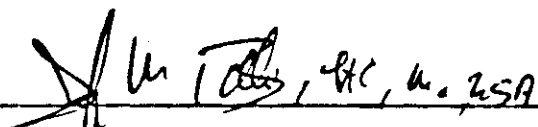
After inquiries into the cause and manner of death by Guyanese officials, including Dr. Leslie Mootoo, forensic pathologist to the government of Guyana, the bodies, which were rapidly putrefying in the hot and humid tropical climate of Guyana, were released by the government of Guyana and transported by the United States Air Force from Jonestown, Guyana to Dover AFB, Delaware between 23 and 26 November 1978. Efforts to identify the bodies and add to the store of reliable information about the causes and manners of their deaths were carried on at Dover AFB from 27 November 1978 onward.

PATHOLOGICAL DIAGNOSES

1. Advanced postmortem decomposition.
2. Trocar embalming artifacts.
3. Surgical resection of cheeks.
4. Postmortem toxicology:
 liver chloroquine - 9.5 mg/100 gm
 tissue cyanide - negative.

Cause of Death: Probable acute cyanide intoxication.

Manner of Death: Undetermined.

 APPROVED SIGNATURE		 APPROVED SIGNATURE			
DOUGLAS S. DIXON, MAJ, MC, USA		JOSEPH M. BALLO, LTC, MC, USA			
MILITARY ORGANIZATION (None required)	AGE	SEX	RACE	IDENTIFICATION NO.	AUTOPSY NO.
	34	Male	Caucasian		
PATIENT'S IDENTIFICATION (For typed or written entries give Name - last, first, middle, grade, date, hospital or medical facility)				REGISTER NO.	WARD NO.
CASTILLO, WILLIAM RICHARD AFIP #1680275					

AUTOPSY REPORT - (A097)

AFIP #1680275

Name: CASTILLO, WILLIAM RICHARD
Age: 34 years
Date of Birth: February 19, 1944
Sex: Male
Race: Caucasian
Date of Death: November 18, 1978
Date of Autopsy: December 15, 1978
Prosecutor: Douglas S. Dixon, Major, MC, USA
Witnesses: Robert L. Thompson, CAPT, MC, USN
Joseph M. Ballo, LTC, MC, USA
Kenneth H. Mueller, LtCol, USAF, MC
Rudiger Breitenecker, M.D., Baltimore, Maryland

This is one of the bodies (A97) transported by the United States Air Force from Jonestown, Guyana to Dover Air Force Base, Delaware.

Body Identification: The body was identified as William Richard Castillo on the basis of fingerprints. Physical parameters including height, age, race, hair color, sex and weight are consistent with antemortem medical records and passport data. The name "R. Castillo" was noted in the blue jeans removed from the body. No antemortem dental X-rays were available.

Description of Clothing: The body was dressed before embalming in a brown shirt, blue jeans, white brief underwear, brown tennis shoes and no socks.

External Description: The body is received in a body bag; the remains were previously embalmed by trocar and coated externally with a white powder consistent with lime. It measures 65 inches in length and weighs 101 pounds. The decedent is a Caucasian male, appearing the recorded age of 34 years. There is moderate postmortem decomposition characterized by skin slippage, brown-green skin discoloration, venous hemolytic pattern and minimal gaseous distention of tissues. The epidermis of the hands has separated from the body in a glove-like fashion and has been utilized for fingerprinting. The head hair is loosely attached and easily falls away from the body; it is dark brown and wavy. The thorax and abdomen are of the usual configuration. The genitalia are those of a normal adult male with both testes present in the scrotum; the presence of circumcision cannot be evaluated. No evidence of trauma is noted. The cheeks are resected to aid in dental identification.

Evidence of Embalming: There are multiple punctures of the tissues of thorax, abdomen, both upper and lower extremities; these measure 0.5 cm in greatest diameter and are consistent with artifacts due to trocar embalming. No other obvious injury is noted externally.

X-ray Findings: Total body X-rays reveal no metallic fragments of any kind. No recent fractures are noted. There is an old fracture of proximal femur (X-rays unlabeled as to side) which correlates with a fracture of the right femur recorded in the medical chart.

Body Cavities: The thoracic and abdominal organs are located in their usual positions, but are shrunken and discolored by decomposition. The pleural and peritoneal cavities are lined by smooth red brown membranes and contain small amounts of red-brown fluid smelling like formaldehyde. No fibrous adhesions are noted.

Internal Description

Cardiovascular System: The heart weighs 150g and is dark red brown with a flabby consistency. The great vessels are distributed normally. The cardiac chambers are of normal size; the myocardium is of normal thickness without evidence of old or recent infarction. The valves are free of disease. Multiple sections of the coronary arteries demonstrate focal subintimal plaques without occlusion. The aorta is free of atherosclerosis. The pulmonary artery contains no thromboemboli.

Pulmonary System: The mucosa of the trachea and bronchi is red-brown with no obvious lesions. The right lung weighs 310g, while the left weighs 360g. They are dark red-brown, shrunken and filled with fluid on cut section. No discrete areas of consolidation are noted.

Gastrointestinal Tract: The esophageal mucosa is red-brown without lesion. The stomach has been punctured by trocar and contains fluid smelling like formaldehyde. There are no lesions of the gastric mucosa which is dark red-brown. The duodenum, small and large bowel are normal.

Liver: The liver weighs 530g and is dark brown and shrunken. The capsule is wrinkled and punctured by trocar. The gall bladder is normally located and empty. No lesions are seen in either organ.

Pancreas: The organ is normally situated. It has a red-brown lobulated appearance and is without obvious lesions.

Kidneys: Together the dark red-brown kidneys weigh 140g and are normally shaped and situated. On cut section, the cortico-medullary demarcation is obscured. No lesions are noted. The ureters are normally situated. The urinary bladder is empty and free of lesions.

Reproductive System: The testes are palpable in the scrotum and free of obvious masses.

Spleen: The red-black spleen weighs 130g and is free of lesions.

Adrenal Glands: The adrenals are normally situated and autolytic.

Neck Organs: The thyroid is normal without hemorrhages or masses. No hemorrhages are seen in the strap muscles. There are no fractures or hemorrhages of the bony or cartilaginous structures of the neck. The laryngeal mucosa is red-brown, but without hemorrhages.

Brain: The brain is tan-green and markedly liquefied. Few normal structures remain intact. There is no obvious hemorrhage or masses. There are no skull fractures appreciated after the dura is stripped.

Specimens for toxicology: Brain, kidney, muscle, liver, lung, spleen, gastric contents and representative teeth having a pink discoloration are submitted for toxicology.

Microscopic Descriptions: Sections of heart, lung, liver and kidneys show no pathologic diagnoses other than marked postmortem decomposition with gaseous distention of tissues and loss of nuclear detail.

Comment:

Because of the condition of this body, specifically markedly decomposed and trocar embalmed, the specimens available for toxicology were less than optimal; standard methods for cyanide detection as well as more experimental approaches have failed to demonstrate cyanide in this case, although chloroquine in much less than toxic amounts was detected.

There is, however, a sound chain of evidence which makes acute cyanide intoxication a defensible and appropriate cause of death in this case. Press reports indicate that many people were witnessed to ingest a purportedly poisoned mixture. Records from Jonestown indicate the availability of bottled cyanide salts in large quantities, and scene photographs depict these bottles opened and placed near the cauldron of fruit juice. At the scene, Dr. Mootoo, consulting forensic pathologist to the government of Guyana, demonstrated cyanide in the gastric contents of sixty-five bodies both by field test and later in the laboratory and in the contents of syringes. Tests performed in the Division of Toxicology at the Armed Forces Institute of Pathology revealed cyanide in probably fatal levels in two of the bodies autopsied as well as in the contents of a syringe received from the scene. In the absence of any other apparent cause of death and with this clear evidentiary chain, it is reasonable and appropriate to attribute the cause of death in this case to acute cyanide intoxication.

The manner of death has been designated undetermined; there is no possible way to decide in an individual case whether the cyanide mixture was ingested/injected willfully or as a result of coercion.

Douglas S. Dixon, Major, MC, USA
DOUGLAS S. DIXON, M.D.
Major, MC, USA
Chief, Division of Forensic Pathology

Joseph M. Ballo, M.D., LTC, MC, USA
JOSEPH M. BALLO, M.D.
LTC, MC, USA
Chief, Missile Trauma Pathology Branch



U.S. AIR FORCE INSTITUTE OF PATHOLOGY

WASHINGTON, D.C. 20306

PATIENT IDENTIFICATION	PLEASE USE AFIP ACCESSION NUMBER IN ALL CORRESPONDENCE
AFIP ACCESSION NUMBER:	1680275
CASTILLO, WILLIAM R.	
PLEASE INFORM US OF ANY PATIENT IDENTIFICATION ERRORS	

ADDRESS REPLY TO THE DIRECTOR
ATTN AFIP - CPL-T

18 April 1979

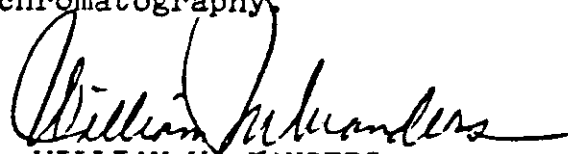
CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

Specimens Submitted: Kidney, muscle, stomach, brain, liver, spleen and teeth.

AFIP DIAGNOSIS:

REPORT OF TOXICOLOGIC EXAMINATION

1. All tissues submitted were putrefied; the body was embalmed prior to autopsy.
2. Acid, neutral drugs - LIVER - None Found.
3. Chloroquine (9.5mg/100gm) was identified in the liver by uv spectrophotometry and gas chromatography.


WILLIAM W. MANDERS
LTCOL, USAF, BSC
Chief, Division of Toxicology