

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.	CHECK ONE		
				FULL AUTOPSY	HEAD ONLY	TRUNK ONLY
PROSECTOR Joseph M. Ballo, LTC, MC, USA		ASSISTANT Douglas S. Dixon, MAJ, MC, USA		X		

CLINICAL DIAGNOSES (Including operations)

This body (later identified as Laurence Eugene Schacht) 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

- Moderately advanced postmortem decomposition with early mummification and maggot infestation; Date and Time of Death: the evening of 18 November 1978; Place of Death: Jonestown, Guyana.
- Surgical resection of both cheeks, postmortem.
- Embalming of body with trocar wound of anterior abdominal wall, stomach and intestines; introduction of embalming fluids.

Cause of Death: Probable Acute Cyanide Poisoning.

Manner of Death: Undetermined.

APPROVED SIGNATURE <i>Joseph M. Ballo</i>		DOUGLAS S. DIXON, MAJ, MC, USA				
JOSEPH M. BALLO, LTC, MC, USA		DOUGLAS S. DIXON, MAJ, MC, USA				
MILITARY ORGANIZATION (If not required)	AGE	SEX	RACE	IDENTIFICATION NO.	AUTOPSY NO.	
	30	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.	
SCHACHT, LAURENCE EUGENE AFIP #1680274						

AUTOPSY PROTOCOL
Standard Form 903
503-104

AUTOPSY REPORT - (I-054)

AFIP #1680274

Name: LAURENCE EUGENE SCHACHT
Age: 30 years
Date of Birth: October 2, 1948
Sex: Male
Race: Caucasian
Date of Death: 18 November 1978
Date of Autopsy: 15 December 1978
Prosecutor: Joseph M. Ballo, LTC, MC, USA
Witnesses: Robert L. Thompson, Capt., MC, USN
Kenneth H. Mueller, LtCol, USAF, MC
Douglas S. Dixon, Major, MC, USA
Rudiger Breitenecker, M.D.

This is one of the bodies (I-054) transported by the USAF from Jonestown, Guyana to Dover Air Force Base, Delaware.

An autopsy is performed on the remains of a body having the recovery number I-054 and identified as the body of Laurence Eugene Schacht. This identification has been effected by the comparison of antemortem and postmortem fingerprints.

Description of Clothing and Personal Effects:

The following items of clothing are present on the body when first examined:

1. Short-sleeved green shirt
2. Light green undershirt
3. Heavy brown fabric pants
4. A pair of "jockey" brand shorts
5. Brown socks
6. Black oxford shoes
7. A tag around the left foot reading "LARY SCHATT"

External Description:

The body is that of a well-developed, well-nourished Caucasian male measuring 68" in length and weighing 112 lb when clothed. The remains are decomposed and the face is partially skeletonized. There is evidence of embalming with a strong odor of formalin in the tissues.

The cephalic hair appears brown and is moderately long. The ears are unremarkable. The color of the irides cannot be ascertained. The dentition is complete and in excellent repair. The nose is unremarkable. The skin is dried,

AUTOPSY REPORT -(I-054)

AFIP #1680274

drawn and appears dessicated. The neck is supple. The thorax is unremarkable and the abdomen is scaphoid. The pubic hair is dark brown, the penis is circumcised and both testes are descended and present in the scrotum. The extremities are unremarkable.

Rigor mortis is not present. Livor mortis is not apparent. In addition to the evidence of embalming, the body has been externally preserved with lime and hardening compound. Both cheeks have been surgically resected.

Evidence of Embalming:

At the level of the umbilicus, 1+1/2" to the right of the midline, is a circular 1/4" perforation of the skin. Internally there is a 1/4" perforation of the anterior wall of the stomach.

X-Ray Examination:

X-rays of the skull, thorax, abdomen, pelvis, upper and lower extremities show no evidence of bony injury, or retained metallic fragments.

Internal Examination of the Body:

The body is opened with the usual Y-shaped thoraco-abdominal and intermastoid bitemporal incisions. The internal organs occupy their usual positions, and have their normal relationships. The body cavities are unremarkable.

Neck organs: The trachea, larynx and strap muscles are removed en bloc. The hyoid bone is intact. There is no hemorrhage into the strap muscles. The thyroid is soft but otherwise unremarkable. The cartilages of the larynx are intact.

Heart: The heart weighs 130 grams. The organ is flabby and there is evidence of postmortem gas production. The coronaries have a left predominant configuration and are everywhere widely patent. The valves are of normal size and configuration and the chambers are of normal size.

Great vessels: There are scattered, smooth, yellow plaques within the wall of the aorta. The carotid arteries are widely patent and the pulmonary arteries are free of clots.

Lungs: The left lung weighs 190 gms. The right lung weighs 280 grams. They are grossly normal on section. The right lung is fixed with preserving fluid and is cast-like in appearance. The pulmonary arteries and veins are normal. The bronchi are normal.

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Gastrointestinal tract: The stomach is perforated and drained. The character of the mucosa is not apparent, the duodenum appears normal. The intestines are parchment-like and empty, having been perforated and drained. The liver weighs 510 gms. and is flabby and discolored. The gallbladder is present but empty.

Genitourinary system: The kidneys weigh 105 gms. in aggregate. They are pale and markedly autolytic. The ureters appear normal. The bladder is empty.

Endocrine system: The pituitary is soft and autolytic, the adrenals are soft but appear normal in character. The pancreas is markedly autolytic.

Hematopoietic system: The spleen weighs 45 gms. and is markedly autolytic.

Central Nervous system: The brain is soft and partially liquefied, putrid, and foul smelling. The dural membranes are intact and when stripped, the bones of the skull are intact.

Microscopic Description:

Microscopic slides prepared from aorta, heart, liver, lung and kidney show only postmortem decomposition and evidence of postmortem gas production.

Summary:

The autopsy performed on this individual's remains revealed no natural gross or microscopic anatomic findings responsible for his death. There was no evidence of antemortem trauma. Total body X-rays revealed no retained missile fragments. Toxicologic analyses revealed diphenhydramine (an anti-histamine) and chlorpromazine (a "major" antidepressant) in muscle, liver, spleen, stomach, brain and lung and chloroquine (an antimalarial) and salicylates in the liver. The levels reported are below commonly accepted lethal levels.

Cyanide is known to be implicated in the deaths of many, if not all, of the non-traumatic fatalities occurring in Jonestown the evening of 18 November 1978. The chain of evidence for this includes the presence of salts of cyanide in the drug inventory of the commune's medical department; photographs of open bottles of cyanide salts in association with other drugs near the vat; evidence by Dr. Leslie Mootoo, consultant pathologist to the government of Guyana, that cyanide was present in syringes found at the scene; similar evidence, from Dr. Mootoo, that cyanide was recovered from the gastric contents of 65 victims; recovery of cyanide by the Division of Toxicology, Armed Forces Institute of Pathology, from a syringe recovered at the scene and the discovery of cyanide in the tissues of two of the individuals autopsied at Dover Air Force Base.

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It is deemed significant that diphenhydramine was recovered from the residue in one of the vats in which the poison was supposedly mixed. This same drug was present in the stomach (11.4 mg%). That cyanide was not recovered from the vat is consistent with the acid pH of the resulting mix (pH = 4.5). Cyanide is unstable at an acid pH. That cyanide was not recovered from the tissues may be a reflection of its not being initially present, or of its not being present at time of examination. The known lability of cyanide in the postmortem interval, the length of this interval in this case (5 days before refrigeration and one month before autopsy) and the intervening embalming introducing the presence of contaminating compounds and possibly diluting (or discarding entirely) relevant body fluids, all provide ample reasons for not finding cyanide.

Therefore, based solely on the circumstances of the death and without any direct supporting anatomic, X-ray or toxicologic findings, we have determined the cause of death in this case to be: Probable Acute Cyanide Poisoning.

Because of the bizarre circumstances surrounding this death and the lack of any information about self-intent or possible coercion, it is not possible to form a conclusion as to manner of death; hence: Undetermined.

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

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



ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, D.C. 20306

PATIENT IDENTIFICATION	PLEASE USE AFIP ACCESSION NUMBER IN ALL CORRESPONDENCE
AFIP ACCESSION NUMBER.	1680274
SCHACHT, LAURENCE E.	
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: Lung, muscle, stomach, brain, liver, teeth and spleen.

AFIP DIAGNOSIS:

REPORT OF TOXICOLOGIC EXAMINATION

- All tissues submitted were putrefied; the body was embalmed prior to autopsy.
- Neutral drugs - LIVER - None Found.
- The following drugs were identified and quantitated by uv spectrophotometry, gas chromatography and verified by mass spectrometry. Amounts reported are in milligrams per 100 grams of tissue.

	<u>MUSCLE</u>	<u>LIVER</u>	<u>SPLEEN</u>	<u>STOMACH</u>	<u>BRAIN</u>	<u>LUNG</u>
Diphenhydramine	0.17	28.9	2.5	11.4	0.8	0.4
Chlorpromazine	0.01	2.1	0.7	3.9	0.2	0.1
Chloroquine	NR	7.8	NR	NR	NR	NR
Salicylates	NR	0.4	NR	NR	NR	NR

William W. Manders
WILLIAM W. MANDERS

LTCOL, USAF, BSC
Chief, Division of Toxicology