

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.
PROJECTOR Robert L. Thompson, CAPT, MC, USN		ASSISTANT Kenneth H. Mueller, LTCOL, USAF		CHECK ONE FULL AUTOPSY HEAD ONLY THORAX ONLY	
				X	

CLINICAL DIAGNOSES (Including operations)

This body (later identified as Maria Katsaris) 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

- Cause of Death: Probable cyanide poisoning.
- Young adult Caucasian female (embalmed) in advanced stages of postmortem decomposition with maggot infestation.
- Manner of Death: Undetermined.

APPROVED—SIGNATURE <i>Robert L. Thompson</i>		APPROVED—SIGNATURE <i>K. H. Mueller</i>			
ROBERT L. THOMPSON, CAPT, MC, USN		KENNETH H. MUELLER, LTCOL, USAF, MC			
MILITARY ORGANIZATION (When required)	AGE 25	SEX Female	RACE Caucasian	IDENTIFICATION NO.	AUTOPSY NO.
PATIENT'S IDENTIFICATION (For typed or written entries give: Name—last, first, middle; grade; date; hospital or medical facility)				REGISTER NO.	WARD NO.
KATSARIS, MARIA AFIP #1680273					

AUTOPSY REPORT - (A006)

AFIP # 1680273

Name: MARIA KATSARIS
Age: 25 years
DOB: September 16, 1953
Sex: Female
Race: Caucasian
Date of Death: November 18, 1978
Date of Autopsy: December 15, 1978
Prosecutor: Robert L. Thompson, Capt, MC, USN
Witnesses: Kenneth H. Mueller, LtCol, USAF, MC
Joseph M. Ballo, LTC, MC, USA
Douglas S. Dixon, Major, MC, USA
Rudiger Breitenecker, M.D.

This is one of the bodies (6A) transported by the USAF from Jonestown, Guyana to Dover Air Force Base, Delaware.

Body Identification:

The body is identified as MARIA KATSARIS by fingerprints taken by the Federal Bureau of Investigation and by comparing post-mortem dental observations with ante-mortem dental records by Colonels Hooker and Morlang, USAF, DC. Physical characteristics are also consistent.

Description of Clothing and Personal Effects:

When first seen during the week of 27 November through 2 December 1978, the body is clothed in a green checked shirt, tan trousers with a brass belt buckle, white socks, blue sneakers, and white panties and bra. Gold-colored earrings are held in place by pierced ears.

External Description:

When first seen sometime during the week of 27 November through 2 December 1978, the body is received clothed (see above) and in a body bag. Post-mortem decomposition is advanced. Maggots are present. The height is measured at 70 inches and weight is measured at 118 pounds. No scars, tattoos, or moles are noted. The scalp hair is brown to black, straight, and drawn up in a pony-tail. The race is judged to be Caucasian. The sex is female. The age is estimated to be somewhere between 25 and 40 years. Upper and lower teeth are present, in good repair, and pink-stained.

When examined again on 15 December 1978, the body is received unclothed and in a body bag. The remains have been embalmed by trocar injection and covered with a whitish powdery preservative. The general appearance is that of a young adult Caucasian female in which post-mortem decomposition is advanced with anterior hair loss, skin generally darkened, and showing skin slippage although some parts of the skin have a leathery appearance. The eyes are sunken and collapsed and color can not be determined. The external genitalia are those of a normal female.

No evidence of injury is noted externally on careful examination of both anterior and posterior aspects of the body, except for puncture marks (1/4") of the abdomen and arms, consistent with an embalmer's trocar; an incision is noted in both cheeks consistent with earlier dental examination.

X-ray Examination:

X-rays of the whole body before internal examination reveal no metallic fragments and no evidence of old or recent bony injury.

Internal Examination:

The usual body incisions and scalp incision are used to expose and examine the viscera.

Body Cavities:

The organs are normally located in their usual positions. They are discolored by decomposition and somewhat shrunken and reek of formalin. The pleural and peritoneal surfaces are smooth and without adhesions. Puncture marks (embalmer's trocar) are noted in most organs of the chest and abdomen. The pleural cavities each contain about 200 ml of dark fluid with the strong odor of formalin.

Head:

The skull is intact; no evidence of hemorrhage is seen in the scalp, or above or below the dura mater. The brain is soft and pasty but otherwise unremarkable.

Neck:

The soft tissues are discolored. The hyoid bone and laryngeal cartilages are intact and without evidence of injury. The larynx and trachea are unremarkable.

Cardiovascular System:

The heart appears to be normal sized; the coronary arteries are widely patent; the valves are normally shaped. The great vessels pursue their normal courses to and from the heart.

Respiratory System:

The lungs appear normally shaped; no parenchymal lesions are seen; the tracheobronchial tree is patent and unremarkable.

Liver and Biliary Tract:

The liver is intact though studded with a network of small holes owing to post-mortem decomposition. The gall-bladder is present and green-stained; the common bile duct is patent.

Gastro-intestinal Tract:

The esophagus is unremarkable; the stomach is empty; the small and large intestines are in their usual positions and deflated by multiple punctures; the pancreas is difficult to recognize owing to post-mortem decomposition; no lesions are noted in these organs.

Hematopoietic System:

The spleen weighs 80 grams; it is soft, mushy and reddish-brown; lymph nodes are not enlarged; bone marrow is unremarkable.

Genito-urinary Tract:

The uterus is present and its endometrial cavity is unremarkable. Ovaries can not certainly be identified. Kidneys, ureters and bladder are unremarkable.

Endocrine System:

Pituitary, thyroid and adrenals are unremarkable. Ovaries, although searched for, can not be certainly identified grossly.

Musculo-skeletal System:

No deformities or injuries are noted. Muscle from the right thigh has an almost normal color (embalming fluid had apparently not penetrated) and therefore 350 grams is taken for toxicology.

Specimens for Toxicology:

Brain, stomach, liver, kidney, spleen, and thigh muscle.

Microscopy:

Representative sections from all organs except brain are examined: they all reveal advanced post-mortem degeneration.

Summary and Opinion:

Postmortem examination of the body of Maria Katsaris demonstrated advanced putrefaction and evidence of embalming. These findings are consistent with the circumstances at and after her death as reported or known to us. Morphological alterations sufficient to account for death were not seen. Toxicological examination (the specimens being taken about one month after death and about 2 weeks after embalming) revealed a mixture of an anti-histamine, an anti-malarial, and a phenothiazine--all of these at tissue levels not ordinarily thought to be lethal--and a level of cyanide in the brain of 0.08 mg%, an amount that could be significant.

In view of the above mentioned observations, the reports of seemingly reliable witnesses, the presence of cyanide in the stomach contents of at least some of the bodies studied at the scene by Dr. Mootoo, and the presence of apparently significant amounts of cyanide in other bodies studied at Dover AFB (as reported by the Toxicology Division of the AFIP), it seems reasonable to say that, in our opinion, the death of Maria Katsaris was probably caused by cyanide poisoning. The manner of death, in our opinion, remains undetermined owing to the lack of reliable and specific information about her own intent and the possibility of coercion by others.

Robert L. Thompson
ROBERT L. THOMPSON, M.D.
Captain, MC, USN
Chairman, Department of
Forensic Sciences

KH Mueller
KENNETH H. MUELLER
LtCol, USAF, MC
Division of Forensic Pathology



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

PATIENT IDENTIFICATION	PLEASE USE AFIP ACCESSION NUMBER IN ALL CORRESPONDENCE
AFIP ACCESSION NUMBER: 1680273	
KATSAKIS, MARIA	
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, kidney, muscle, stomach, brain, liver, spleen and teeth.

AFIP DIAGNOSIS:

REPORT OF TOXICOLOGIC EXAMINATION

- All tissues submitted were putrefied; the body was embalmed prior to autopsy.
- Acid, Neutral drugs - LIVER - None Found.
- The following drugs were identified and quantitated by uv spectrophotometry, gas chromatography, and verified by mass spectrometry. Cyanide was analyzed using a NiCl₂ method. Amounts reported in milligrams per 100 grams tissue/

	<u>BRAIN</u>	<u>SPLEEN</u>	<u>LIVER</u>	<u>MUSCLE</u>	<u>KIDNEY</u>	<u>LUNG</u>	<u>STOMACH</u>
Diphenhydramine	0.3	1.9	0.4	0.9	0.6	0.5	45.2
Chlorpromazine	0.06	11.8	3.6	0.03	0.8	0.4	283.7
Chloroquine	NR	NR	12.1	NR	NR	NR	NR
Cyanide	0.08	NR	NR	NR	NR	NR	NR

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