



ARMED FORCES INSTITUTE OF PATHOLOGY
Office of the Armed Forces Medical Examiner
1413 Research Blvd., Bldg. 102
Rockville, MD 20850
1-301-319-0000



AUTOPSY EXAMINATION REPORT

Name: BTB Muhyi, Talib, Umar
ISN: (b)(6)
Date of Birth: (b)(6) 1982
Date of Death: (b)(6) 2006
Date/Time of Autopsy: 25 MAR 2006
@ 1100 hrs
Date of Report: 19 MAY 2006

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Detainee
Place of Death: Iraq
Place of Autopsy: Port Mortuary, Dover
AFB, DE

Circumstances of Death: This 24 year-old detainee was, as reported, noted to have decreased urine output at about 1315 hrs, (b)(6) 2006. The detainee was transported by ambulance to the 344TH Emergency Trauma Room by ambulance. He arrived not breathing and his pupils were fixed and dilated. He had a past medical history significant for poorly controlled Type I diabetes mellitus (HgBA1C=10.4%). Despite treatment provided the detainee expired.

Authorization for Autopsy: Office of the Armed Forces Medical Examiner, IAW 10 USC 1471

Identification: Circumstantial identification by examination of accompanying paperwork.

CAUSE OF DEATH: Complications of Diabetes Mellitus (Diabetic Ketoacidosis)

MANNER OF DEATH: Natural

FINAL AUTOPSY DIAGNOSIS

- I. Renal System:
 - A. Glomerular changes consistent with diffuse diabetic glomerulosclerosis.
 - B. Hyaline arteriolosclerosis.
 - C. Severe autolysis.

- II. Cardiovascular System:
 - A. Morphologically normal heart (Heart Weight – 310-grams)

- III. Pulmonary System:
 - A. Pulmonary Congestion and Edema (Lung Weights: Right – 690-grams; Left – 670-grams)
 - B. Bilateral Serous Pleural Effusions (Right – 50-milliliters; Left – 50-milliliters)

- IV. Hepatobiliary System:
 - A. Liver:
 - 1. Congestion
 - 2. Mild steatosis
 - 3. Increased lipofuscin pigment

- V. Endocrine System:
 - A. Adrenal: No pathologic disease
 - B. Pancreas: Focal periductal fibrosis and autolysis

- VI. Serous Ascites: 100-milliliters

- VII. No significant injuries are identified.

- VIII. Minor Injuries: Abrasion of the left side of the face, ¼-inch

- IX. Toxicology (AFIP):
 - A. CARBON MONOXIDE: The Carboxyhemoglobin saturation in the blood is less than 1%.
 - B. CYANIDE: There is no cyanide detected in the blood.
 - C. VOLATILES: Acetone and 2-propanol are detected in the blood and vitreous fluid (concentrations in mg/dL).

	Acetone	2-Propanol
Blood	29	17
Vitreous Fluid	42	Trace
 - D. DRUGS: No screened drugs of abuse or medications are detected in the urine.

- X. Vitreous Electrolytes (WRAMC): Sodium – 115 mmol/L, Potassium – not able to obtain results, Chloride – 88 mmol/L, Glucose – 10 mg/dL, BUN 37 mg/dL and Creatinine 11.0 mg/dL

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished appearing, 66-inch tall, 140-pounds male whose appearance is consistent with the reported age of 24-years. Lividity is present on the posterior surface of the body except in areas exposed to pressure. Rigor is passing and present only in the lower extremities.

The scalp is covered with brown hair in a normal distribution. Facial hair consists of a moustache and beard. The irides are brown, and the pupils are round and equal in diameter. The external auditory canals and ears are unremarkable. The nares are patent and the lips are atraumatic. The nose and maxillae are palpably stable. The teeth appear natural.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. The abdomen is flat. The genitalia are those of a normal adult male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric and without clubbing or edema.

The skin of the hands and feet is wrinkled.

CLOTHING AND PERSONAL EFFECTS

The following clothing items and personal effects are present on the body at the time of autopsy:

- Yellow jump suit (wet)
- Tan shirt (cut down the front and wet))

MEDICAL INTERVENTION

- Nasogastric tube in the left nostril
- Endotracheal intubation
- One EKG lead on the torso
- Intravenous access in the right antecubital fossa
- A needle puncture on the right wrist

RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates the following:

- No blunt force or penetrating injuries are identified

EVIDENCE OF INJURY

No significant injuries are identified. There is no evidence of blunt force or penetrating injuries of the torso or extremities. There are no significant blunt force or penetrating injuries of the head and neck. There is no evidence of torture.

Minor Injury: There is a 1/4 -inch abrasion of the left side of the face.

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. Clear cerebrospinal fluid surrounds the 1400-gram brain, which has unremarkable gyri and sulci. Coronal sections demonstrate sharp demarcation between white and grey matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum, and arterial systems are free of injury or other abnormalities. There are no skull fractures. The atlanto-occipital joint is stable.

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 thyroid is symmetric and red-brown, without cystic or nodular change. The tongue is free of bite marks, hemorrhage, or other injuries.

BODY CAVITIES:

The ribs, sternum, and vertebral bodies are visibly and palpably intact. There is 50-milliliters of serous fluid in both chest cavities and 100-milliliters of serous ascites. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:

The right and left lungs weigh 690 and 670-grams, respectively. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:

The 310-gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable. (See Cardiovascular Pathology Consultation Report)

LIVER & BILIARY SYSTEM:

The 1540-gram liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains 20-milliliters of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:

The 80-gram spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

AUTOPSY REPORT

(b)(6)

BTB Muhyi, Talib, Umar

(b)(6)

PANCREAS:

The pancreas is soft, tan and is moderately decomposed. No mass lesions or other abnormalities are seen.

ADRENALS:

The right and left adrenal glands are symmetric, with bright yellow cortices and grey medullae. No masses or areas of hemorrhage are identified.

GENITOURINARY SYSTEM:

The right and left kidneys weigh 190 and 180-grams, respectively. The external surfaces are intact and slightly granular in appearance. The cut surfaces 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 contains approximately 280-milliliters of clear yellow urine. The prostate is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

GASTROINTESTINAL TRACT:

The esophagus is intact and lined by smooth, grey-white mucosa. The stomach contains approximately 100-milliliters of brown fluid. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

HEPATOPATHOLOGY CONSULTATION

13 April 2006

Liver: Congestion, mild steatosis, increased lipofuscin pigment. There is nothing to suggest any significant liver disease.

(b)(6)

ENDOCRINE PATHOLOGY CONSULTATION

14 April 2006

Adrenal: No pathologic disease.

Pancreas: Pancreas is mostly autolytic. In the areas in which the tissue is not involved (*by autolysis*) there are no significant abnormalities. There is focal peri-ductal fibrosis.

This finding is not related to his clinical condition.

(b)(6)

RENAL PATHOLOGY CONSULTATION

24 April 2006

Kidneys:

1. Glomerular changes consistent with diffuse diabetic glomerulosclerosis. The capillary walls are thick; special stains and EM may exclude immune complex glomerulonephritis (membranous glomerulonephritis).
2. Hyaline arteriolosclerosis.
3. Severe autolysis.

In view of the clinical data (Type I diabetes) the glomerular and vascular changes are consistent with diabetes.

(b)(6)

CARIOVASCULAR PATHOLOGY CONSULTATION

28 April 2006

DIAGNOSIS: (b)(6) Morphologically normal heart

History: 24 year old Iraqi detainee with Type I diabetes and reported decreased urine output; transported to emergency room, arrived in full arrest and could not be resuscitated

Heart: 310-grams; normal epicardial fat; probe patent foramen ovale; normal left ventricular chamber dimensions; left ventricular cavity diameter 30-millimeters, left ventricular free wall thickness 10-millimeters, ventricular septum thickness 13-millimeters; right ventricular dilation: right ventricle thickness 3-millimeters, without gross scars or fat infiltrates; grossly normal valves and endocardium; no gross myocardial fibrosis or necrosis; histologic sections show focal epicardial and subepicardial lymphocytic infiltrates in the anterior and lateral left ventricle without myocyte necrosis or scarring, and a single small focus of subendocardial replacement fibrosis in the lateral left ventricle

Coronary arteries: Normal ostia; left dominance; no gross Atherosclerosis

Conduction system: The sinoatrial node and sinus nodal artery are unremarkable. The compact atrioventricular (AV) node is intact without inflammation, increased fat or vascularity. The penetrating bundle is centrally located within the fibrous body and is unremarkable. The proximal left bundle branch is intact; the right bundle branch is not seen in the section. There are no discrete bypass tracts between the AV node and ventricular septum. The AV nodal artery and its branches show no dysplasia.

Comment: The significance of a small focus of subepicardial chronic inflammation is unknown, as is a single focus of subendocardial fibrosis. In the absence of any other demonstrable cause of death, arrhythmia on the basis of coronary vasospasm or ion channelopathy cannot be excluded.

(b)(6)

Cardiovascular Pathologist

MICROSCOPIC EXAMINATION

- Liver: congestion, mild steatosis, increased lipofuscin pigment
- Adrenal: representative sections are histologically unremarkable
- Pancreas: extensive autolysis with focal peri-ductal fibrosis
- Kidneys: extensive autolysis with hyaline arteriosclerosis and glomerular capillary basement membrane thickening
- Spleen: congestion, otherwise histologically unremarkable
- Lungs: multiple representative sections show vascular congestion and mild focal anthracotic pigment deposition, focal atelectasis, focal hemorrhage without hemosiderin laden macrophages (likely artefact)
- Brain: representative sections are histologically unremarkable

ADDITIONAL PROCEDURES

1. Documentary photographs are taken by OAFME staff photographers.
2. Full body radiographs are obtained and demonstrate no injuries.
3. Specimens retained for toxicology testing and/or DNA identification are: blood, vitreous, urine, bile, liver, spleen, brain, kidney, lung, adipose tissue, muscle and gastric contents
4. The dissected organs are forwarded with the body.
5. Selected portions of organs are retained in formalin.
7. Identifying marks include: Scars on the left foot and left knee.

OPINION

This 24 year old male died of complications of diabetes mellitus (diabetic ketoacidosis). The deceased had a medical history significant for poorly controlled Type I diabetes and there was a clinical impression of diabetic ketoacidosis in Iraq. The kidneys exhibited changes that are consistent with a history of diabetes. The heart was morphologically normal. There was no evidence of significant physical injury. The toxicology screen was significant for acetone in the blood (29-mg/dL) and vitreous fluid (42-mg/dL) and 2-propanol in the blood (17-mg/dL) and vitreous fluid (trace). The vitreous glucose was 10-mg/dL and this level was most likely effected by post-mortem metabolism. The remainder of the toxicology screen is negative. There were no significant physical injuries identified at autopsy. The manner of death is natural (b)(6)

(b)(6)

(b)(6)

(b)(6) Medical Examiner

(b)(6) Medical Examiner (b)(6)



DEPARTMENT OF DEFENSE
 ARMED FORCES INSTITUTE OF PATHOLOGY
 WASHINGTON, DC 20306-6000

REPLY TO
 ATTENTION OF

AFIP (b)(6)

PATIENT IDENTIFICATION

AFIP Accessions Number Sequence
 (b)(6)

Name
 MUHYI, TALIB UMAR

SSAN: Autopsy: (b)(6)

Toxicology Accession #: (b)(6)

Date Report Generated: April 3, 2006

TO:

OFFICE OF THE ARMED FORCES MEDICAL
 EXAMINER
 ARMED FORCES INSTITUTE OF PATHOLOGY
 WASHINGTON, DC 20306-6000

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS REPORT OF TOXICOLOGICAL EXAMINATION

Condition of Specimens: GOOD

Date of Incident: Date Received: 3/30/2006

CARBON MONOXIDE: The carboxyhemoglobin saturation in the blood was less than 1% as determined by spectrophotometry with a limit of quantitation of 1%. Carboxyhemoglobin saturations of 0-3% are expected for non-smokers and 3-10% for smokers. Saturations above 10% are considered elevated and are confirmed by gas chromatography.

CYANIDE: There was no cyanide detected in the blood. The limit of quantitation for cyanide is 0.25 mg/L. Normal blood cyanide concentrations are less than 0.15 mg/L. Lethal concentrations of cyanide are greater than 3 mg/L.

VOLATILES: The **BLOOD AND VITREOUS FLUID** were examined for the presence of ethanol (cutoff of 20 mg/dL), acetaldehyde, acetone, 2-propanol, 1-propanol, t-butanol, 2-butanol, iso-butanol and 1-butanol by headspace gas chromatography. The following volatiles were detected: (concentration(s) in mg/dL)

	Acetone	2-Propanol
BLOOD	29	17
VITREOUS FLUID	42	Trace

Trace = value greater than or equal to 1mg/dL, but less than 5 mg/dL



DEPARTMENT OF DEFENSE
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WASHINGTON, DC 20306-8000

REPLY TO
ATTENTION OF

**REPORT OF TOXICOLOGICALM EXAMINATION (CONT - MUHYI, TALIB
UMAR):**

DRUGS: The URINE was screened for acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, salicylates, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

None were found.

(b)(6)

Office of the Armed Forces Medical Examiner

(b)(6)

Office of the Armed Forces Medical Examiner

CERTIFICATE OF DEATH (OVERSEAS) Acta de décès (D'Outre-Mer)			
NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) BTB Muhyi, Talib, Umar		GRADE Grade	BRANCH OF SERVICE Arme Civilian
ORGANIZATION Organisation		NATION (e.g. United States) Pays Iraq	SOCIAL SECURITY NUMBER Numéro de l'Assurance Social (b)(6)
		DATE OF BIRTH Date de naissance	SEX Sexe <input checked="" type="checkbox"/> MALE <input type="checkbox"/> FEMALE
RACE Race		MARITAL STATUS Etat Civil	
CAUCASOID Caucasique		SINGLE Célibataire	
NEGROID Négre		MARRIED Marié	
<input checked="" type="checkbox"/> OTHER (Specify) Autre (Spécifier)		WIDOWED Veuf	
		DIVORCED Divorcé	
		SEPARATED Séparé	
		PROTESTANT Protestant	
		CATHOLIC Catholique	
		JEWISH Juif	
		OTHER (Specify) Autre (Spécifier)	
NAME OF NEXT OF KIN Nom du plus proche parent		RELATIONSHIP TO DECEASED Parenté du décédé avec le sus	
STREET ADDRESS Domicile à (Rue)		CITY OR TOWN OR STATE (Include ZIP Code) Ville (Code postal compris)	
MEDICAL STATEMENT Déclaration médicale			
CAUSE OF DEATH (Enter only one cause per line) Cause du décès (N'indiquer qu'une cause par ligne)			INTERVAL BETWEEN ONSET AND DEATH Intervalle entre l'attaque et le décès
DISEASE OR CONDITION DIRECTLY LEADING TO DEATH Maladie ou condition directement responsable de la mort		Complications of Diabetes Mellitus (Diabetic Ketoacidosis)	
ANTECEDENT CAUSES Symptômes précus de la mort	MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu menant à la cause primaire		
	UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu menant à la cause primaire		
OTHER SIGNIFICANT CONDITIONS Autres conditions significatives			
MODE OF DEATH Condition de décès	AUTOPSY PERFORMED Autopsie effectuée	CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures	
<input checked="" type="checkbox"/> NATURAL Mort naturelle	MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie		
<input type="checkbox"/> ACCIDENT Mort accidentelle			
<input type="checkbox"/> SUICIDE Suicide	NAME OF PATHOLOGIST Nom du pathologiste (b)(6)		
<input type="checkbox"/> HOMICIDE Homicide	(b)(6)	DATE Date 25 March 2006	AVIATION ACCIDENT Accident à l'Avion <input type="checkbox"/> YES Ou <input checked="" type="checkbox"/> NO Non
DATE OF DEATH (day, month, year) Date de décès (le jour, le mois, l'année) (b)(6) 2006	PLACE OF DEATH Lieu de décès		
I HAVE VIEWED THE REMAINS OF THE DECEASED AND DEATH OCCURRED AT THE TIME INDICATED AND FROM THE CAUSES AS STATED ABOVE J'ai examiné les restes mortels du défunt et je conclus que le décès est survenu à l'heure indiquée et à la suite des causes énumérées ci-dessus			
NAME OF MEDICAL OFFICER Nom du médecin militaire ou du médecin saisi		TITLE OR DEGREE Titre ou diplôme Medical Examiner	
GRADE Grade (b)(6)		INSTALLATION OR ADDRESS Installation ou adresse Dover AFR Dover DE	
DATE Date 05 Oct 06		(b)(6)	

DD FORM 1 APR 77 2064

REPLACES DA FORM 3466, 1 JAN 77 AND DA FORM 3862-R(PAS), 29 SEP 76, WHICH ARE OBSOLETE.

MEDCOM 0613



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 Rank: Detainee
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 Place of Autopsy: Port Mortuary, Dover
 AFB, DE

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Authorization for Autopsy: Office of the Armed Forces Medical Examiner, IAW 10 USC 1471

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CAUSE OF DEATH: Complications of Diabetes Mellitus (Diabetic Ketoacidosis)

MANNER OF DEATH: Natural

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AUTOPSY REPORT (b)(6)

2

BTB Muhyi, Talib, Umar (b)(6)**FINAL AUTOPSY DIAGNOSIS**

- I. Renal System:
- A. Glomerular changes consistent with diffuse diabetic glomerulosclerosis.
 - B. Hyaline arteriosclerosis.
 - C. Severe autolysis.
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- A. Morphologically normal heart (Heart Weight – 310-grams)
- III. Pulmonary System:
- A. Pulmonary Congestion and Edema (Lung Weights: Right – 690-grams; Left – 670-grams)
 - B. Bilateral Serous Pleural Effusions (Right – 50-milliliters; Left – 50-milliliters)
- IV. Hepatobiliary System:
- A. Liver:
 1. Congestion
 2. Mild steatosis
 3. Increased lipofuscin pigment
- V. Endocrine System:
- A. Adrenal: No pathologic disease
 - B. Pancreas: Focal periductal fibrosis and autolysis
- VI. Serous Ascites: 100-milliliters
- VII. No significant injuries are identified.
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- IX. Toxicology (AFIP):
- A. CARBON MONOXIDE: The Carboxyhemoglobin saturation in the blood is less than 1%.
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	Acetone	2-Propanol
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Vitreous Fluid	42	Trace
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The neck is straight, and the trachea is midline and mobile. The chest is symmetric. The abdomen is flat. The genitalia are those of a normal adult male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric and without clubbing or edema.

The skin of the hands and feet is wrinkled.

CLOTHING AND PERSONAL EFFECTS

The following clothing items and personal effects are present on the body at the time of autopsy:

- Yellow jump suit (wet)
- Tan shirt (cut down the front and wet)

MEDICAL INTERVENTION

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RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates the following:

- No blunt force or penetrating injuries are identified

EVIDENCE OF INJURY

No significant injuries are identified. There is no evidence of blunt force or penetrating injuries of the torso or extremities. There are no significant blunt force or penetrating injuries of the head and neck. There is no evidence of torture.

Minor Injury: There is a 1/4 -inch abrasion of the left side of the face.

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. Clear cerebrospinal fluid surrounds the 1400-gram brain, which has unremarkable gyri and sulci. Coronal sections demonstrate sharp demarcation between white and grey matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum, and arterial systems are free of injury or other abnormalities. There are no skull fractures. The atlanto-occipital joint is stable.

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 thyroid is symmetric and red-brown, without cystic or nodular change. The tongue is free of bite marks, hemorrhage, or other injuries.

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The right and left lungs weigh 690 and 670-grams, respectively. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:

The 310-gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable. (See Cardiovascular Pathology Consultation Report)

LIVER & BILIARY SYSTEM:

The 1540-gram liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains 20-milliliters of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:

The 80-gram spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

AUTOPSY REPORT (b)(6)

5

BTB Muhyi, Talib, Umar (b)(6)

PANCREAS:

The pancreas is soft, tan and is moderately decomposed. No mass lesions or other abnormalities are seen.

ADRENALS:

The right and left adrenal glands are symmetric, with bright yellow cortices and grey medullae. No masses or areas of hemorrhage are identified.

GENITOURINARY SYSTEM:

The right and left kidneys weigh 190 and 180-grams, respectively. The external surfaces are intact and slightly granular in appearance. The cut surfaces 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 contains approximately 280-milliliters of clear yellow urine. The prostate is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

GASTROINTESTINAL TRACT:

The esophagus is intact and lined by smooth, grey-white mucosa. The stomach contains approximately 100-milliliters of brown fluid. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

HEPATOPATHOLOGY CONSULTATION

13 April 2006

Liver: Congestion, mild steatosis, increased lipofuscin pigment. There is nothing to suggest any significant liver disease.

(b)(6)

ENDOCRINE PATHOLOGY CONSULTATION

14 April 2006

Adrenal: No pathologic disease.

Pancreas: Pancreas is mostly autolytic. In the areas in which the tissue is not involved (*by autolysis*) there are no significant abnormalities. There is focal peri-ductal fibrosis. This finding is not related to his clinical condition.

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24 April 2006

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(b)(6)

CARIOVASCULAR PATHOLOGY CONSULTATION

28 April 2006

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Comment: The significance of a small focus of subepicardial chronic inflammation is unknown, as is a single focus of subendocardial fibrosis. In the absence of any other demonstrable cause of death, arrhythmia on the basis of coronary vasospasm or ion channelopathy cannot be excluded.

(b)(6)

Cardiovascular Pathologist

AUTOPSY REPORT (b)(6)

BTB Muhyi, Tallb, Umar (b)(6)

7

MICROSCOPIC EXAMINATION

- Liver: congestion, mild steatosis, increased lipofuscin pigment
- Adrenal: representative sections are histologically unremarkable
- Pancreas: extensive autolysis with focal peri-ductal fibrosis
- Kidneys: extensive autolysis with hyaline arteriosclerosis and glomerular capillary basement membrane thickening
- Spleen: congestion, otherwise histologically unremarkable
- Lungs: multiple representative sections show vascular congestion and mild focal anthracotic pigment deposition, focal atelectasis, focal hemorrhage without hemosiderin laden macrophages (likely artefact)
- Brain: representative sections are histologically unremarkable

ADDITIONAL PROCEDURES

1. Documentary photographs are taken by OAFME staff photographers.
2. Full body radiographs are obtained and demonstrate no injuries.
3. Specimens retained for toxicology testing and/or DNA identification are: blood, vitreous, urine, bile, liver, spleen, brain, kidney, lung, adipose tissue, muscle and gastric contents
4. The dissected organs are forwarded with the body.
5. Selected portions of organs are retained in formalin.
7. Identifying marks include: Scars on the left foot and left knee.

OPINION

This 24 year old male died of complications of diabetes mellitus (diabetic ketoacidosis). The deceased had a medical history significant for poorly controlled Type I diabetes and there was a clinical impression of diabetic ketoacidosis in Iraq. The kidneys exhibited changes that are consistent with a history of diabetes. The heart was morphologically normal. There was no evidence of significant physical injury. The toxicology screen was significant for acetone in the blood (29-mg/dL) and vitreous fluid (42-mg/dL) and 2-propanol in the blood (17-mg/dL) and vitreous fluid (trace). The vitreous glucose was 10-mg/dL and this level was most likely effected by post-mortem metabolism. The remainder of the toxicology screen is negative. There were no significant physical injuries identified at autopsy. The manner of death is natural. (b)(6)

(b)(6)	(b)(6)	(b)(6)
(b)(6)	Medical Examiner	(b)(6)
(b)(6)	Medical Examiner	(b)(6)



**DEPARTMENT OF DEFENSE
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000**

REPLY TO
ATTENTION OF

AFIP (b)(6)

TO:

**OFFICE OF THE ARMED FORCES MEDICAL
EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000**

PATIENT IDENTIFICATION

AFIP Accessions Number **Sequence**
(b)(6)

Name
MUHYI, TALIB UMAR

SSAN: **Autopsy:** (b)(6)

Toxicology Accession #: (b)(6)

Date Report Generated: April 3, 2006

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS REPORT OF TOXICOLOGICAL EXAMINATION

Condition of Specimens: GOOD

Date of Incident: **Date Received:** 3/30/2006

CARBON MONOXIDE: The carboxyhemoglobin saturation in the blood was less than 1% as determined by spectrophotometry with a limit of quantitation of 1%. Carboxyhemoglobin saturations of 0-3% are expected for non-smokers and 3-10% for smokers. Saturations above 10% are considered elevated and are confirmed by gas chromatography.

CYANIDE: There was no cyanide detected in the blood. The limit of quantitation for cyanide is 0.25 mg/L. Normal blood cyanide concentrations are less than 0.15 mg/L. Lethal concentrations of cyanide are greater than 3 mg/L.

VOLATILES: The **BLOOD AND VITREOUS FLUID** were examined for the presence of ethanol (cutoff of 20 mg/dL), acetaldehyde, acetone, 2-propanol, 1-propanol, t-butanol, 2-butanol, iso-butanol and 1-butanol by headspace gas chromatography. The following volatiles were detected: (concentration(s) in mg/dL)

	Acetone	2-Propanol
BLOOD	29	17
VITREOUS FLUID	42	Trace

Trace = value greater than or equal to 1mg/dL, but less than 5 mg/dL



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REPLY TO
ATTENTION OF

**REPORT OF TOXICOLOGICALM EXAMINATION (CONT - MUHYI, TALIB
UMAR):**

DRUGS: The URINE was screened for acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, salicylates, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

None were found.

(b)(6)

Office of the Armed Forces Medical Examiner

(b)(6)

Office of the Armed Forces Medical Examiner

CERTIFICATE OF DEATH (OVERSEAS) Acte de décès (D'Outre-Mer)			
NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) BTB Muhyi, Talib, Umar		GRADE Grade	BRANCH OF SERVICE Arme Civilian
ORGANIZATION Organisation		NATION (e.g., United States) Pays Iraq	SOCIAL SECURITY NUMBER Numéro de l'Assurance Social (b)(6)
		DATE OF BIRTH Date de naissance	SEX Sexe <input checked="" type="checkbox"/> MALE <input type="checkbox"/> FEMALE
RACE Race		MARITAL STATUS Etat Civil	
CAUCASOID Caucasique		SINGLE Célibataire	
NEGROID Négre		MARRIED Marié	
OTHER (Specify) Autre (Spécifier)		DIVORCED Divorcé	
		SEPARATED Séparé	
		WIDOWED Veuf	
		PROTESTANT Protestant	
		CATHOLIC Catholique	
		JEWISH Juif	
NAME OF NEXT OF KIN Nom du plus proche parent		RELATIONSHIP TO DECEASED Parenté du décédé avec le sus	
STREET ADDRESS Domicile à (Rue)		CITY OR TOWN OR STATE (include ZIP Code) Ville (Code postal compris)	
MEDICAL STATEMENT Déclaration médicale			
CAUSE OF DEATH (Enter only one cause per line) Cause du décès (N'indiquer qu'une cause par ligne)			INTERVAL BETWEEN ONSET AND DEATH Intervalle entre l'attaque et le décès
DISEASE OR CONDITION DIRECTLY LEADING TO DEATH Maladie ou condition directement responsable de la mort		Complications of Diabetes Mellitus (Diabetic Ketoacidosis)	
ANTECEDENT CAUSES Symptômes précus seurs de la mort	MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire		
	UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire		
OTHER SIGNIFICANT CONDITIONS Autres conditions significatives			
MODE OF DEATH Condition de décès	AUTOPSY PERFORMED Autopsie effectuée <input checked="" type="checkbox"/> YES Ou <input type="checkbox"/> NO Non	CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures	
<input checked="" type="checkbox"/> NATURAL Mort naturelle	MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie		
<input type="checkbox"/> ACCIDENT Mort accidentelle			
<input type="checkbox"/> SUICIDE Suicide	NAME OF PATHOLOGIST Nom du pathologiste (b)(6)		
<input type="checkbox"/> HOMICIDE Homicide	(b)(6)	DATE Date 25 March 2006	AVIATION ACCIDENT Accidents à Avion <input type="checkbox"/> YES Ou <input checked="" type="checkbox"/> NO Non
DATE OF DEATH (day, month, year) Date du décès (le jour, le mois, l'année) (b)(6) 2006	PLACE OF DEATH Lieu de décès		
I HAVE VIEWED THE REMAINS OF THE DECEASED AND DEATH OCCURRED AT THE TIME INDICATED AND FROM THE CAUSES AS STATED ABOVE J'ai examiné les restes mortels du défunct et je certifie que le décès est survenu à l'heure indiquée et à la suite des causes énumérées ci-dessus			
NAME OF SERVICE OFFICER Nom de l'officier de service		TITLE OR DEGREE Titre ou diplôme	
(b)(6)		Medical Examiner	
GRADE Grade (b)(6)	INSTALLATION OR ADDRESS Installation ou adresse (b)(6)		
DATE Date 05 Oct 06			
<small>1. State disease, injury or complication which caused death. 2. State conditions contributing to the death, but not return. 3. Precise the nature of the disease, of the trauma or of the complication which contributed to the death, plus non la manière de mourir, telle qu'un arrêt du cœur, etc. 4. Preciser la condition qui a contribué à la mort, ainsi qu'il y a eu aucun rapport avec la maladie ou à la condition qui a provoqué la mort.</small>			
FORM DD APR 77 2064 REPLACES DA FORM 1348, 1 JAN 73 AND DA FORM 1365-R(PAS), 29 SEP 76, WHICH ARE OBSOLETE.			