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

# FINAL AUTOPSY EXAMINATION REPORT

Name: BTB Daraj, Rasoul Jabal
ISN: (b)(6)
Date of Birth: (b)(6) 1981
Date of Death (b)(6) 2006
Date/Time of Autopsy: 29 March 2006/0900
Date of Report: 04 October 2006

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

**Circumstances of Death:** This 25 year old male civilian detainee reportedly sustained head injury as the result of an assault by fellow inmates.

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

**Identification:** Presumptive, according to hospital band.

**CAUSE OF DEATH: Complications of blunt force head injuries.**

**MANNER OF DEATH: Homicide.**

## FINAL AUTOPSY DIAGNOSES

I. Blunt force injuries:
   A. Injuries of the head and neck:
      1. Left-sided depressed skull fracture (per report).
      2. Subacute left-sided subdural hematoma.
      3. Subacute contusions in the left middle parietal and lateral occipital lobes.
      4. Multiple healing (sutured) lacerations of the left parietal, occipital and vertex regions of the scalp.
      5. Abrasion (1 inch) of the left lateral surface of the neck.
   B. Injuries of the torso:
      1. Fracture of the right acromion.
         a. Subcutaneous and intramuscular hemorrhage of the anterior surface of the right shoulder.
      2. Hemorrhage of the proximal portion of the right spermatic cord.
   C. Injuries of the extremities:
      1. Multiple healing (sutured) lacerations of the posterior surface of the left forearm.
      2. Healing lacerations (2) of the left lower leg.
      3. Multiple contusions of the right leg.

II. Additional findings:
   A. Subacute meningocerebroventriculitis with early abscess formation.
   B. Multifocal acute to subacute cerebral infarcts.
   C. Diffuse acute hypoxic/ischemic neuronal injury.
   D. Status post left hemicraniectomy.
   E. Status post ventriculostomy placement.
   F. Bilateral pulmonary congestion (right 860 gm, left 740 gm).

III. Toxicology: Morphine and midazolam are present in the blood. Metoclopramide is present only in the urine.

## EXTERNAL EXAMINATION

The body is that of a well-developed, thin appearing male. The body weighs 133 pounds, is 68 inches in length and appears compatible with the reported age of 25 years. The body temperature is cool after refrigeration. Rigor is present to an equal degree in all extremities. Lividity is fixed and present predominately on the posterior surfaces of the body, except in areas exposed to pressure.

The scalp hair is black. A 15 inch curvilinear stapled incision extends from the left frontal region posteriorly through the right occipital region to the left temporal region, terminating just anterior to the left external ear. Facial hair consists of a black beard. The irides are brown. The corneae are cloudy. The conjuctivae are unremarkable. The sclerae are white. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal skeleton is palpably intact. The teeth appear natural and in fair condition.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. No evidence of injury of the ribs or the sternum is evident externally. The abdomen is flat. A healing 5 inch vertical incision is present on the right side of the abdomen. The fingernails are intact. The extremities show evidence of injury to be described below. (b)(6) tattoo (b)(6) (b)(6) Multiple scars are present on the posterior surface of the left elbow (area 4 ½ x 2 inches) and the dorsal surface of the left hand (2 ¾ x 2 inches). The external genitalia are those of a normal adult male. The posterior torso is without note. The buttocks and anus are unremarkable.

## EVIDENCE OF INJURY

Head and neck:

A healing, sutured 1 inch laceration is present in the right temporal region (posterior to right external ear) of the scalp. A healing 1 ½ inch laceration is present in the left parietal region of the scalp. There are multilple, healing confluent lacerations in the left occipital region of the scalp covering an area measuring 1 ¼ x 1 inch. There are multiple healing, sutured lacerations in the central vertex occipital region of the scalp, covering an area measuring 4 ½ x 2 ¼ inches. A linear 1 inch abrasion is on the left lateral surface of the neck. Internal examination reveals a left-sided subacute subdural hematoma.

Torso:

A ½ inch abrasion is present on the posterior surface of the left shoulder. There are multiple irregular healing lesions on the upper and lower back ranging in size from 1/8 to ¾ inch. Internal examination shows focal intramuscular and subcutaneous hemorrhage in the right upper chest and infraclavicular regions. There is hemorrhage in the region of the right spermatic cord.

Extremities:

There are multiple healing abrasions and sutured lacerations on the dorsal surface of the left upper arm and forearm covering an area measuring 2 ½ x 1 inch, ranging in size from 1/8 to ½ inch. A ¾ inch ill defined contusion is on the dorsal surface of the left wrist. There are multiple healing abrasions on the

dorsal surface of the left hand and index finger ranging in size from 1/16 to 3/16 inch. A focal ¼ inch subcutaneous hematoma is present on the palmar surface of the left middle finger. Incision of the left wrist reveals focal subcutaneous hemorrhage in the ulnar region. There is a 6 x 3 inch discontinuous contusion on the anterior surface of the right lower leg. There are two healing lacerations on the medial surface of the left lower leg and the medial surface of the left ankle (¼ inch each).

## EVIDENCE OF MEDICAL THERAPY

Evidence of medical therapy consists of:

1. Intracranial catheter with tubing and drainage bag.
2. Intravascular catheters in the left subclavian region, the right wrist and the left forearm.
3. A foley catheter.
4. Probable therapeutic puncture site on the dorsal surface of the right foot.
5. Status post left hemi-craniectomy with shunt catheter placement.
6. Left parietal portion of skull placed in abdomen.

## INTERNAL EXAMINATION

HEAD:
(See above "Evidence of Medical Therapy" and "Evidence of Injury")

The staples are removed and the entire scalp is reflected. The posterior portion of the surgical flap (approximately 2 ¾ x 2 inches) is dark and appears devitalized. The remaining calvarium is removed. The 1720 gm brain is placed in fixative pending consultative review. No skull fractures are noted. 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. No excess fluid is in the pericardial, pleural or peritoneal cavities. The organs occupy their usual anatomic positions. There is no internal evidence of blunt force or penetrating injury to the thoraco-abdominal region.

RESPIRATORY SYSTEM:
The right and left lungs weigh 860 gm and 740 gm, respectively. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is moderately congested and edematous. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:
The 460 gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries arise normally, follow the usual distribution and are

widely patent, without evidence of significant atherosclerosis or thrombosis. The myocardium is homogenous, red-brown, and firm; the atrial and ventricular septa are intact. The aorta gives rise to three intact and patent arch vessels. The vena cava and its major tributaries return to the heart in the usual distribution. The renal and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 1620 gm 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 approximately 5 ml of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 170 gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

PANCREAS:
The pancreas is firm and yellow-tan, with the usual lobular architecture. No mass lesions or other abnormalities are seen.

ADRENALS GLANDS:
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 170 gm and 160 gm, respectively. The external surfaces are intact and smooth. 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. Tan bladder mucosa overlies an intact bladder wall. The bladder is empty. The urine collection bag contains 200 ml of cloudy 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 250 ml of dark green liquid material. The gastric wall is intact. The duodenum, loops of small bowel, colon and appendix are unremarkable.

MUSCULOSKELETAL SYSTEM:
Muscle development is normal. No bone or joint abnormalities are noted.

## CONSULTATIVE REPORT

Neuropathology Consultation:

The dura is remarkable for adherent surgical material and blood clot in the left frontoparietal region; two additional foci of subdural hemorrhage are noted in the right parietal region. Thick purulent

exudates are identified on the surfaces of the cerebral hemispheres, on the basilar surface of the cerebrum, on the ventral surface of the midbrain and on the cerebellar vermis. A 1.5 x 1 cm soft area associated with an overlying purulent exudate is noted in the inferior left temporal lobe. Both cerebral hemispheres exhibit diffuse gyral flattening and sulcal narrowing. A 3.2 x 3 cm area of contusion and laceration is identified in the left superior parietal lobe. A similar 3 x 3 cm lesion is present in the lateral left occipital lobe. A white plastic catheter, 0.3 cm in diameter, is identified in the left middle frontal gyrus. The circle of Willis has a normal adult configuration without aneurysms, significant atherosclerosis, or occlusions.

Coronal sections of the cerebrum show a cortical ribbon of normal thickness, well demarcated from subjacent white matter. There is a diffuse dusk discoloration of the cerebral cortex. The left parietal and occipital lobe contusions are confirmed; subjacent wedge-shaped hemorrhagic infarcts, extending up to 4 cm into the white matter, are associated with each contusion. The brain is edematous and soft. A slight right to left shift is identified that focally compresses the right ventricular system more than the left. Definite cingulate gyrus herniation is not identified. The ventricular system is filled with a purulent exudate with the left side containing more than the right. The shunt catheter is noted within the ventricular system. The basal ganglia, thalami, and hypothalamus are unremarkable. Other than the previously described purulent exudate, transverse sections of the cerebellum and brainstem are unremarkable. The substantia nigra and locus ceruleus are normally pigmented for age. The aqueduct is slit-like. The spinal cord is not submitted, but the uppermost cervical cord and cervicomedullary junction are unremarkable.

Microscopic sections of meninges demonstrate patchy acute and chronic inflammation with multifocal abscess formation; several leptomeningeal vessels have inflammatory cells within their walls, consistent with a secondary vasculitis. Foci of hemorrhage, surgical material, and granulation tissue are also noted in the leptomeninges. Extensive perivascular and parenchymal acute/chronic inflammation and gliosis are present in several regions of the cerebrum. A large collection of neutrophils associated with necrosis is noted in the section from the left parietal periventricular region, consistent with early abscess formation. Special stains for microorganisms reveal a mixture of short gram-positive coccobacilli and acid-fast bacteria that are interpreted as contaminants. Multiple foci of rarefaction, vacuolation, lipid-and hemosiderin-laden macrophages, hypereosinophilic neurons, acute hemorrhage and subacute inflammation are identified, consistent with multifocal acute to subacute cerebral and pontine infarcts. Numerous hypereosinophilic neurons are identified in the cerebral cortex, deep gray matter, hippocampus, brainstem, and cerebellum consistent with diffuse acute hypoxic/ischemic neuronal injury. The subdural hemorrhage consists of intact and degenerating erythrocytes adjacent to the dura matter and a well-formed fibrous layer on the arachnoid side. Many pigment-laden macrophages are present. These changes are consistent with a subacute subdural hematoma.

In summary, the above changes are consistent with a subacute meningocerebroventriculitis with early abscess formation, subacute contusions in the left middle parietal and lateral occipital lobes, multifocal acute to subacute infarcts, diffuse acute hypoxic/ischemic neuronal injury, and a left subacute subdural hematoma; the subdural most likely occurred at the time of initial trauma with a secondary component occurring as a result of medical intervention.

## RADIOLOGIC EXAMINATION

Full body radiographs are obtained revealing, in addition to above, fracture of the acromion of the right scapula. No evidence of non-therapeutic metallic foreign bodies is identified.

## ADDITIONAL PROCEDURES

- Documentary photographs are taken by the OAFME staff photographers.
- Specimens retained for toxicologic testing and/or DNA identification are: blood, bile, gastric contents, urine, vitreous, lung, liver, kidney, spleen, adipose tissue and psoas muscle.
- Selected portions of organs are retained in formalin.
- Personal effects are released to the appropriate mortuary operations representatives.

## OPINION

According to reports this 25 year old male detainee sustained a depressed skull fracture as the result of an assault by fellow inmates. During his hospitalization, he underwent a left-sided craniectomy for decompression followed by placement of an intraventricular cathether for subsequent hydrocephalus. His clinical course was complicated by gram negative meningitis and multiple cerebral infarcts. He ultimately sucuumbed to complications of his head injuries on his 13th hospital day. Postmortem toxicological examination showed only the presence of the therapeutic agents morphine (blood 0.63 mg/L), midazolam (blood 0.09 mg/L) and metoclopramide (detected in urine only). The manner of death is homicide.

This case was reviewed in consultation with Department of Neuropathology. Their written consultation is incorporated into the above report.

(b)(6)

(b)(6) Medical Examiner

# CERTIFICATE OF DEATH *(OVERSEAS)*

Acte de décès (D'Outre-Mer)

| NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Sociale |
|---|---|---|---|
| BTB Daraj, Rasoul, Jabal | | Civilian | (b)(6) |
| **ORGANIZATION** Organisation | **NATION** (e.g. United States) Pays: Iraq | **DATE OF BIRTH** Date de naissance: (b)(6) 1981 | **SEX** Sexe: [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS État Civil | | | RELIGION Culte | | |
|---|---|---|---|---|---|---|---|
| | CAUCASOID Caucasique | | SINGLE Célibataire | | DIVORCED Divorcé | | PROTESTANT Protestant |
| | NEGROID Negroide | | MARRIED Marié | | SEPARATED Séparé | | CATHOLIC Catholique |
| X | OTHER (Specify) Autre (Spécifier) | | WIDOWED Veuf | | | | JEWISH Juif |
| | | | | | | X | 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 CONDITON DIRECTLY LEADING TO DEATH[1] Maladie ou condition directement responsable de la mort | Complications of blunt force head injuries | |
| ANTECEDENT CAUSES — MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| Symptômes précurseurs de la mort — UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| OTHER SIGNIFICANT CONDITIONS[2] Autres conditions significatives[2] | | |

| MODE OF DEATH Condition de décès | | AUTOPSY PERFORMED Autopsie effectuée: [X] YES Oui [ ] NO Non | CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort causées par des causes extérieures |
|---|---|---|---|
| | NATURAL Mort naturelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| | ACCIDENT Mort accidentelle | | |
| | SUICIDE Suicide | NAME OF PATHOLOGIST Nom du pathologiste: (b)(6) | |
| X | HOMICIDE Homicide | SIGNATURE: (b)(6) DATE Date: 29 March 2006 | AVIATION ACCIDENT Accident d'Avion: [ ] YES Oui [X] 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: Iraq

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 dé funt 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 sanitaire | TITLE OR DEGREE Titre ou diplôme |
|---|---|
| (b)(6) | Medical Examiner |

| GRADE Grade | INSTALLATION OR ADDRESS Installation ou adresse |
|---|---|
| (b)(6) | Dover AFB, Dover DE |
| DATE Date: 4/17/06 | SIGNATURE: (b)(6) |

[1] State disease, injury or complication which caused death, but not mode
[2] State conditions contributing to the death, but not related to the disease or condition causing death.
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort, mais non le mode de mourir, telle qu'un arrêt du cœur, etc.
[2] Préciser les conditions qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou à la condition qui a provoqué la mort

DD FORM 1 APR 77 2064 REPLACES DA FORM 3565, 1 JAN 72 AND DA FORM 3565-R(PAS), 29 SEP 75, WHICH ARE OBSOLETE.

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# 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. Hepatobilliary 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).

| | Actetone | 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, Potasium – 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.

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 PATHOLOLOGY 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
DIAGNOSIOS: (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, arrythmia 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 arteriolosclerosis 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 diabtetes. 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) **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

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

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) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Sociale |
|---|---|---|---|
| BTB Muhyi, Talib, Umar | | Civilian | (b)(6) |
| **ORGANIZATION** Organisation | **NATION** *(e.g. United States)* Pays: Iraq | **DATE OF BIRTH** Date de naissance | **SEX** Sexe: [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS Etat Civil | | | RELIGION Culte | | |
|---|---|---|---|---|---|---|---|
| | CAUCASOID Caucasique | | SINGLE Célibataire | | DIVORCED Divorcé | | PROTESTANT Protestant | | OTHER (Specify) Autre (Spécifier) |
| | NEGROID Negroide | | MARRIED Marié | | SEPARATED Séparé | | CATHOLIC Catholique | X | |
| X | OTHER (Specify) Autre (Spécifier) | | WIDOWED Veuf | | | | 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 CONDITON DIRECTLY LEADING TO DEATH [1] Maladie ou condition directement responsable de la mort | Complications of Diabetes Mellitis (Diabetic Ketoacidosis) | |
| ANTECEDENT CAUSES Symptômes précurseurs de la mort — MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| ANTECEDENT CAUSES Symptômes précurseurs de la mort — UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| OTHER SIGNIFICANT CONDITIONS [2] Autres conditions significatives [2] | | |

| MODE OF DEATH Condition de décès | | AUTOPSY PERFORMED Autopsie effectuée: [X] YES Oui [ ] NO Non | CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures |
|---|---|---|---|
| X | NATURAL Mort naturelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| | ACCIDENT Mort accidentelle | | |
| | SUICIDE Suicide | NAME OF PATHOLOGIST Nom du pathologiste: (b)(6) | |
| | HOMICIDE Homicide | (b)(6) — DATE Date: 25 March 2006 | AVIATION ACCIDENT Accident d'Avion: [ ] YES Oui [X] NO Non |

| DATE OF DEATH *(day, month, year)* Date de décès (le jour, le mois, l'année) | PLACE OF DEATH Lieu de décès |
|---|---|
| (b)(6) 2006 | |

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 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 sanitaire | TITLE OR DEGREE Titre ou diplôme |
|---|---|
| (b)(6) | Medical Examiner |

| GRADE Grade | INSTALLATION OR ADDRESS Installation ou adresse |
|---|---|
| (b)(6) | Dover AFB, Dover DE |

DATE Date: 05 OCT 06 — (b)(6)

[1] State disease, injury or complication which caused death
[2] State conditions contributing to the death, but not related to the disease or condition causing death
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort, mais non la maladie ou mort telle qu'un arrêt du coeur, etc
[2] Préciser la condition qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou à la condition qui a provoqué la mort

DD FORM 1 APR 77 2064 — REPLACES DA FORM 3565, 1 JAN 72 AND DA FORM 3565-R(PAS), 28 SEP 76, WHICH ARE OBSOLETE.

**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. Hepatobilliary 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, Potasium – 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.

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 PATHOLOLOGY 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
DIAGNOSIOS: (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, arrythmia 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 arteriolosclerosis 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 diabtetes. 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) 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

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

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) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Social |
|---|---|---|---|
| BTB Muhyi, Talib, Umar | | Civilian | (b)(6) |
| **ORGANIZATION** Organisation | **NATION** *(e.g. United States)* Pays: Iraq | **DATE OF BIRTH** Date de naissance | **SEX** Sexe: [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS Etat Civil | | | RELIGION Culte | | |
|---|---|---|---|---|---|---|---|
| | CAUCASOID Caucasique | | SINGLE Célibataire | | DIVORCED Divorce | | PROTESTANT Protestant | | OTHER (Specify) Autre (Spécifier) |
| | NEGROID Negroide | | MARRIED Marié | | SEPARATED Séparé | | CATHOLIC Catholique | X | |
| X | OTHER (Specify) Autre (Spécifier) | | WIDOWED Veuf | | | | 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 CONDITON DIRECTLY LEADING TO DEATH [1] Maladie ou condition directement responsable de la mort | Complications of Diabetes Mellitis (Diabetic Ketoacidosis) | |
| ANTECEDENT CAUSES — MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| Symptômes précurseurs de la mort — UNDERLYING CAUSE IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| OTHER SIGNIFICANT CONDITIONS [2] Autres conditions significatives [2] | | |

| MODE OF DEATH Condition de décès | | AUTOPSY PERFORMED Autopsie effectuée [X] YES Oui [ ] NO Non | CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures |
|---|---|---|---|
| X | NATURAL Mort naturelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| | ACCIDENT Mort accidentelle | | |
| | SUICIDE Suicide | NAME OF PATHOLOGIST Nom du pathologiste (b)(6) | |
| | HOMICIDE Homicide | (b)(6) | |

| DATE Date | AVIATION ACCIDENT Accident d'Avion |
|---|---|
| 25 March 2006 | [ ] YES Oui [X] NO Non |

| DATE OF DEATH (day, month, year) (le jour, le mois, l'année) | PLACE OF DEATH Lieu de décès |
|---|---|
| (b)(6) 2006 | |

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 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 traitant | TITLE OR DEGREE Titre ou diplôme |
|---|---|
| (b)(6) | Medical Examiner |

| GRADE Grade | INSTALLATION OR ADDRESS Installation ou adresse |
|---|---|
| (b)(6) | (b)(6) |

DATE Date: 05 OCT 06

[1] State disease, injury or complication which caused death
[2] State conditions contributing to the death, but not return
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort, mais non la manière de mourir telle qu'un arrêt du coeur, etc.
[2] Préciser la condition qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou à la condition qui a provoqué la mort

DD FORM 1 APR 77 2064 REPLACES DA FORM 3565, 1 JAN 72 AND DA FORM 3565-R(PAS), 29 SEP 76, WHICH ARE OBSOLETE.

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

# FINAL AUTOPSY REPORT

Name: Hammid, Raad Kairy
ISN: (b)(6)
Date of Birth: (b)(6) 1979
Date of Death (b)(6) 2006
Date of Autopsy: 20 Feb 2006
Date of Report: 1 May 2006

Autopsy No. (b)(6)
AFIP No.: (b)(6)
Rank: Civilian, Iraqi
Place of Death: Baghdad, Iraq
Place of Autopsy: Dover AFB/Port Mortuary

**Circumstances of Death:** Iraqi civilian detainee within the Baghdad central confinement facility hospital ICU died after developing new onset seizures and subsequent documentation of severe brain edema with reported areas of intra parenchymal hemorrhage.

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

**Identification:** Identification tags on the body.

**CAUSE OF DEATH:** Hypoxic-ischemic encephalopathy due to meningoencephalitis of unknown origin

**MANNER OF DEATH:** Natural

**FINAL AUTOPSY DIAGNOSES:**

I. Hypoxic-ischemic encephalopathy with meningoencephalitis of unknown origin
   a. Severe brain edema with uncal and cerebellar tonsil herniation
   b. Clinical diagnosis of encephalitis with new onset seizures
   c. Generalized body edema and severe pulmonary edema and congestion
   d. Bilateral adrenal gland hemorrhage and necrosis

II. Bronchopneumonia with thick airway mucous secretions

III. Bladder mucosa petechiae, Foley catheter in place

IV. Right lower lip, inner surface, contusion, ½ inch

V. No evidence of other significant natural disease or trauma

VI. Identifying Marks, none

VII. Property on the body at the time of autopsy examination, none

VIII. Toxicology:

   a. Carbon Monoxide: 1% carboxyhemoglobin saturation
   b. Cyanide: None detected
   c. Volatiles: No ethanol detected
   d. Drugs: None of the screened for drugs/substances were detected

## EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished appearing, muscular, Iraqi, male, 69.5 inches tall, 174 pounds whose appearance is consistent with the reported age of 27 years. Postmortem lividity is purple red and fixed on the posterior surfaces of the body except in areas previously exposed to pressure. Rigor is dissipating and the body is cold to touch.

The scalp is covered with black curly hair in a normal distribution. The irides are brown and the pupils are round and equal in diameter. The external auditory canals are patent. The ears are otherwise unremarkable. The nares are patent and the lips are well developed. The nose and maxillae are palpably stable. The teeth appear natural and in adequate repair.

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 palpable 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. No significant blunt force or penetrating trauma is evident. The body and extremities have generalized edema particularly the right thigh and hands. The hands have a black gritty substance possibly fingerprint ink or other similar material.

## CLOTHING AND PERSONAL EFFECTS

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

- None

## MEDICAL INTERVENTION

- Nasal gastric tube, appropriate positioning
- Endotracheal tube, appropriate positioning
- Cardiac monitor pads, usual locations
- Indwelling intravenous catheters:
  - Right antecubital fossa
  - Right and left inguinal areas
- Foley catheter, appropriate positioning

## RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates no metal or fractures.

## EVIDENCE OF INJURY

The inner surface of the right side of the lower lip has a ½ inch contusion. No other injuries were identified

## 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. No meningitis is appreciated grossly. Clear cerebrospinal fluid surrounds the 1420 gm brain, with flat gyri and narrowed sulci. There is uncal herniation and clear cerebellar tonsil herniation and necrosis. No subdural or subarachnoid hemorrhage is present. The arterial system appears free of abnormality. The transverse and sigmoid sinuses have thrombosis bilaterally. There are no skull fractures. The atlanto-occipital joint is stable. The brain is otherwise fixed for neuropathology consultation at the Armed Forces Institute of Pathology, which provided a separate consultation report.

NECK:
The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage. The thyroid cartilage and hyoid bone 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. Dissection of the upper posterior neck to the level of C2/3 demonstrates no paracervical muscular injury and no cervical spine fractures at this level.

BODY CAVITIES:
The ribs, sternum, and vertebral bodies are visibly and palpably intact. The left pleural cavity contains approximately 200 ml of serosanguinous fluid. The right pleural cavity contains a small volume of similar fluid. The pericardial and peritoneal cavities do not contain an increase in fluid. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs weigh 940 and 840 gm, respectively. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions are evident. The right lower lobe is consolidated and the right and left large and small airways contain thick yellow tan mucoid secretions. These secretions focally obstruct or plug the peripheral airways.

CARDIOVASCULAR SYSTEM:
The 420 gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show no significant atherosclerosis. The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.5 and 0.6 -cm thick, respectively. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 2270 gm 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 a minute amount of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 280 gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

PANCREAS:
The pancreas is firm and yellow-tan, with the usual lobular architecture. No mass lesions or other abnormalities are seen.

ADRENALS:
The right and left adrenal glands are hemorrhagic, 30 grams each, with autolysis and necrotic purple brown medullae. No masses are identified.

GENITOURINARY SYSTEM:
The right and left kidneys weigh 180 and 210 gm, respectively. The external surfaces are intact and smooth. 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 mucosa has scattered petechiae. The bladder is empty. 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 dark autolyzed mucosa. The stomach contains approximately 50 cc of greenish brown semi-liquid material. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

## *ADDITIONAL PROCEDURES*

- Documentary photographs are taken by OAFME photographer.
- No trace evidence or foreign material is collected.
- Specimens retained for toxicologic testing and/or DNA identification are: vitreous, blood, spleen, liver, brain, kidney, lung, bile, gastric, skin/adipose tissue and psoas.
- The dissected organs are forwarded with body.
- Personal effects are released to the appropriate mortuary operations representatives.

## *MICROSCOPIC EXAMINATION*

Selected portions of organs are retained in formalin. Selected small tissue pieces are processed for histologic slides as described below. These slides have been examined and there are no additional significant pathologic findings other than those confirmed and listed in the final diagnosis or internal examination sections of this report.

### *Block List:*

| | |
|---|---|
| 1,2 Myocardium | 3 Testicle and myocardium |
| 4,5 Lung | 6 Liver |
| 7 Lung | 8 Kidney |
| 9 Spleen | 10 Lung |
| 11 Dura | 12/13 Adrenal gland |

## *OPINION*

This 27 year-old Iraqi, male, civilian, detainee, died of hypoxic-ischemic encephalopathy due to meningoencephalitis of unknown origin. The brain was examined by the Neuropathology, Environmental and Infectious Disease Sciences, and the Hematopathology Departments of the Armed Forces Institute of Pathology, Washington, DC (Separate reports). The manner of death is natural.

(b)(6)

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

# CERTIFICATE OF DEATH *(OVERSEAS)*
## Acte de décès (D'Outre-Mer)

| NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'assurance Sociale |
|---|---|---|---|
| Hammid, Raad, Kairy | | Civilian | (b)(6) |
| **ORGANIZATION** Organisation | **NATION** (e.g. United States) Pays | **DATE OF BIRTH** Date de naissance | **SEX** Sexe |
| | Iraq | (b)(6) 1979 | [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS Etat Civil | | | RELIGION Culte | | |
|---|---|---|---|---|---|---|---|
| [X] | CAUCASOID Caucasique | [ ] | SINGLE Célibataire | [ ] DIVORCED Divorcé | [ ] | PROTESTANT Protestant | [ ] OTHER (Specify) Autre (Spécifier) |
| [ ] | NEGROID Negroide | [ ] | MARRIED Marié | [ ] SEPARATED Séparé | [ ] | CATHOLIC Catholique | [X] |
| [ ] | OTHER (Specify) Autre (Spécifier) | [ ] | WIDOWED Veuf | | [ ] | 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 CONDITON DIRECTLY LEADING TO DEATH [1] Maladie ou condition directement responsable de la mort | Determination Pending | Days |
| ANTECEDENT CAUSES Symptômes précurseurs de la mort — MORBID CONDITION IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| ANTECEDENT CAUSES Symptômes précurseurs de la mort — UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| OTHER SIGNIFICANT CONDITIONS [2] Autres conditions significatives [2] | | |

| MODE OF DEATH Condition de décès | AUTOPSY PERFORMED Autopsie effectuée [X] YES Oui [ ] NO Non | CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures |
|---|---|---|
| [ ] NATURAL Mort naturelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | Mode of Death : Pending |
| [ ] ACCIDENT Mort accidentelle | (b)(6) | |
| [ ] SUICIDE Suicide | NAME OF PATHOLOGIST (b)(6) | |
| [ ] HOMICIDE Homicide | Signature — Date: 20 February 2006 | AVIATION ACCIDENT Accident d'Avion [ ] YES Oui [X] NO Non |

| DATE OF DEATH (day, month, year) Date de décès (le jour, le mois, l'année) | PLACE OF DEATH Lieu de décès |
|---|---|
| (b)(6) 2006 | |

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 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 légiste ou du médecin sanitaire | TITLE OR DEGREE Titre ou diplôme |
|---|---|
| (b)(6) | Medical Examiner |

| GRADE Grade | INSTALLATION OR ADDRESS Installation ou adresse |
|---|---|
| (b)(6) | Dover AFB, Dover DE |
| **DATE** Date: 11 APR 06 | **SIGNATURE** Signature |

[1] State disease, injury or complication which causes death, but not mode of dying such as heart failure, etc.
[2] State conditions contributing to the death, but not related to the disease or condition causing death.
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort, mais non le mandera de mourir telle qu'un arrêt du cœur, etc.
[2] Préciser la condition qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou la condition qui a provoqué la mort.

DD FORM 1 APR 77 2064 REPLACES DA FORM 3565, 1 JAN 72 AND DA FORM 3566-R(PAS), 26 SEP 76, WHICH ARE OBSOLETE.

**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: GHADBAN, Talib E.
ISN: (b)(6)
Date of Birth: not known
Date of Death: (b)(6) 2006
Date of Autopsy: 15 JAN 2006 at 0930
Date of Report: 13 MAR 2006

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: not applicable
Place of Death: Baghdad, Iraq
Place of Autopsy: Port Mortuary
Dover AFB, DE

**Circumstances of Death:** Decedent admitted to the 344th Field Hospital on 31 Dec 05 complaining of being light-headed. On 02 Jan 06, the detainee is reported to have suffered a stroke with subsequent severe brain swelling. Distorted brain anatomy was seen in imaging studies (CT scan). Detainee was removed from respirator on 7 Jan 06, 0800, but feeding tube kept in place. Detainee pronounced at 1123(b)(6) 06.

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

**Identification:** Presumptive identification by assigned ISN.

**CAUSE OF DEATH:** ATHEROSCLEROTIC CEREBRAL VASCULAR DISEASE

**MANNER OF DEATH:** NATURAL

**AUTOPSY DIAGNOSES**

I. Central Nervous System:
- A. Acute infarction of the right cerebral hemisphere in territory of the right middle cerebral artery; the histologic appearance is consistent with infarct that has been approximately one week or less in duration
- B. Subfalcine and transtentorial herniation
- C. Thrombus, organizing, right middle cerebral artery; atherosclerotic and arteriolosclerotic vascular disease

II. Cardiovascular Pathology:
- A. Cardiomegaly 400 grams, predicted normal 310 grams for 138 pound male
- B. Mildly thickened and redundant tricuspid valve
- C. Focal microscopic subepicardial scarring, of unknown significance
- D. Left anterior descending artery: 30% luminal narrowing by pathologic intimal thickening
- E. Right coronary artery: 30% luminal narrowing by pathologic intimal thickening
- F. There is focal microscopic subepicardial scarring, the significance of which is unknown

III. Nephrosclerosis with granular renal surface appearance, focal infarct of left kidney and bilateral cortical thinning

IV. Evidence of Medical Intervention
- A. Nasogastric feeding tube appropriately positioned
- B. Intravenous access site in left femoral crease
- C. Evidence of intravenous access sites in left and right antecubital fossae
- D. Foley urinary catheter
- E. EKG pads on right shoulder and left leg
- F. Treated decubitus ulcer on right back

V. Toxicology:
- A. Blood is negative for carboxyhemoglobin (carbon monoxide)
- B. Blood and urine are negative for ethanol
- C. Blood is negative for cyanide
- D. Urine is negative for screened drugs of abuse
- E. Urine is positive for lidocaine
- F. Urine is positive for lorazepam

## EXTERNAL EXAMINATION

The clothed body is that of a normally developed, adequately nourished, 65-1/2-inches, 138 pounds, Caucasian male whose appearance is consistent with an age range extending from the mid-to-late sixth through seventh decades. Lividity is posterior and fixed, rigor is passing, and the temperature is that of the refrigeration unit.

The scalp is covered with medium length black-graying hair, distributed in a male balding pattern, and a black-gray mustache and stubble beard. There is no evidence of cranio-facial trauma. The corneae are opacified, the underlying irides are brown, and the pupils are round and equal. The sclerae are slightly injected. The external auditory canals are clear. The ears are unremarkable. The nares are patent and the lips are atraumatic. The nose and maxillae are palpably stable. The lower jaw is edentulous; numerous teeth of the upper jaw are missing and those present are markedly worn.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. A circumscribed circular area of erythema over the right epigastrium measures 1 inch in diameter. The abdomen is slightly protuberant but without mass or fluid wave. The genitalia are those of a normal circumcised adult male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. There is a 1/2 inch resolving contusion on the right side of the upper back. There are two circumscribed areas of erythema on the right side of the mid-back. A 2-1/2 inch circumscribed area of hyperpigmentation is present at the superior aspect of the gluteal crease. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric and without clubbing. There is a resolving, 1/2 inch contusion on the volar surface of the right forearm. Circumscribed hyperpigmented areas are present on the dorsal surfaces of both right and left hands. The skin of the hands is mildly edematous and the finger nail beds are cyanotic. The skin of the legs, from the soles of the feet to the level of the knees is darker brown than the skin of the remaining body surface.

## MEDICAL INTERVENTION

A nasogastric feeding tube is positioned through the left naris. There is evidence of previous intravascular access in the antecubital fossae bilaterally, as well as in the left femoral crease. A urinary catheter is positioned through the urethra. EKG pads are present on the right shoulder and left leg. A healing decubitus ulcer measuring 2-1/4 x 1 inch, with a gel dressing placed over it, is present on the left side of the back along the lateral scapular border. A plastic coated hospital identification bracelet printed with the decedent's name encircles the left wrist.

## RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates an absence of skeletal trauma and metallic foreign bodies

## INTERNAL EXAMINATION

HEAD (See Neuropathology Consult):
The galeal and subgaleal soft tissues of the scalp are free of injury. There are no skull fractures, and the dura mater underlying the calvarium is intact as well. 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 bone are intact. The larynx is lined by intact white mucosa. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The tip of the tongue is dessicated, but free of bite marks, hemorrhage, or other injuries. The bones of the cervical spine are intact and there is no evidence of soft tissue hemorrhage when layer-wise anterior and posterior dissections are extended to the spinal column.

BODY CAVITIES:
The ribs, sternum, and vertebral bodies are visibly and palpably intact. A 50 cc serous effusion is present in the left hemithorax, and a 400 cc serous effusion is present in the right hemithorax. The pericardial sac contains 20 cc of clear fluid. There is no excess fluid in the peritoneal cavity. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs weigh 690 and 560-grams, respectively. A few filmy adhesions extend from the visceral to the parietal surfaces of the right upper lung lobe. The external surfaces are deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. There is a small amount of white froth in the distal trachea and bronchi. No other significant abnormality is noted.

CARDIOVASCULAR SYSTEM (See Cardiovascular Pathology Consult):
The aorta gives rise to three intact and patent arch vessels. No significant lesion is present in the thoracic or abdominal segments of the aorta. The renal and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 1570-gram liver has an intact, smooth capsule with prominent lobular patterning. The parenchyma is uniform tan-brown. No mass lesions or other abnormalities are seen. The gallbladder contains slightly less than 10 cc of green-black bile; there are no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 170-gram spleen has an intact, red-purple capsule. Several adhesions extend from the splenic surface to adjacent organs and to the abdominal wall. The parenchyma is uniformly deep purple with distinct Malpighian corpuscles. There is no evidence of a focal lesion.

PANCREAS:
The pancreas is firm and yellow-tan, with the usual lobular architecture. 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 170 and 180-grams, respectively. The external surfaces of the kidneys are finely granular. There is a faint wedge-shaped infarct in the superior pole of the left kidney. The cut surfaces, apart from the infarcted tissue, are red-tan and congested, with slight thinning of the 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, having been drained by the urinary catheter. The prostate gland is enlarged with yellow-tan parenchyma and palpable poorly defined nodules. 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 70-milliliters of partially digested food. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

MUSCULOSKELETAL AND INTEGUMENTARY SYSTEM
Muscle development is normal. No bone or joint abnormalities are noted. All areas of hyperpigmentation are examined by limited dissection; in no instance is there evidence of soft tissue hemorrhage. There is no evidence of injury to the back, wrists or the backs of the legs.

## MICROSCOPIC EXAMINATION

Selected portions of organs are retained in formalin, with preparation of histologic slides as appropriate.

## ADDITIONAL PROCEDURES/REMARKS

- Documentary photographs are taken by the OAFME staff photographers.
- Specimens submitted for toxicology and DNA analysis: vitreous, blood, gastric contents, bile, urine, brain, lung, liver, kidney, spleen, adipose, and psoas muscle.
- Full body radiographs are obtained and reflect injuries described above.
- Selected portions of organs are retained in formalin and histologic sections prepared as appropriate.
- The dissected organs are forwarded with the body.
- Personal effects are released to the appropriate mortuary operations representatives.

## SUBSPECIALTY CONSULTATION: NEUROPATHOLOGY

(b)(6) Neuropathology, reviewed in conference 3/3/2006

**Brain, postmortem examination: Acute infarction of the right cerebral hemisphere in territory of the right middle cerebral artery. Subfalcine and transtentorial herniation. Thrombus, organizing, right middle cerebral artery. Atherosclerotic and arteriolosclerotic vascular disease.**

A 1426-gram formalin-fixed brain was received. The falx cerebri is unremarkable. The remainder of the dura is not available for examination. The leptomeninges are thin and translucent, with congested meningeal vessels; minimal fresh subarachnoid hemorrhage is noted at the right inferior temporal gyrus. Contusion is not identified. There is diffuse softening of the right cerebral hemisphere. The cerebral gyral pattern is normal, but there is diffuse flattening. The cranial nerves are unremarkable. The circle of Willis shows a normal pattern. The cerebral blood vessels are removed. No aneurysms are seen. There is thrombosis of the right middle cerebral artery starting near the origin and extending to the second major bifurcation. Both posterior cerebral arteries have focal atherosclerotic plaques. There is right-to-left subfalcine herniation. There is right uncal (transtentorial) herniation with necrosis; the left uncus is notched with no flattening. No tonsillar (transforaminal) herniation is seen. The brainstem and cerebellum have diffuse moderate softening. Coronal sections of cerebrum show diffuse enlargement and softening of the right cerebral hemisphere (frontal, parietal, and temporal lobes), involving cortex, white matter, basal ganglia and thalamus. The cortico-medullary junction is preserved. A focal white matter hemorrhage is noted, right frontal lobe. Some focal hemorrhages involve the deep cortex and superficial white matter of the right occipital lobe. The left cerebral hemisphere is compressed. Right-to-left subfalcine and transtentorial herniation is confirmed. The third ventricle and right lateral ventricle are collapsed and displaced; the left lateral ventricle is displaced. The midbrain is compressed and contains multiple hemorrhages; the cerebral aqueduct is slit-like. The substantia nigra and locus caeruleus are well pigmented. A small linear hemorrhage is noted in the right rostral pons. The cerebellum, medulla oblongata, and fourth ventricle are unremarkable. The thoracolumbar spinal cord is not available for examination. A CD showing gross features of the brain is enclosed.

Summary of sections: 1. Left superior/middle frontal gyrus. 2. Left inferior parietal lobule. 3. Left superior/middle temporal gyrus. 4. Bilateral cingulate gyri (left inked black). 5. Left hippocampus. 6. Left caudate/putamen. 7. Left putamen/pallidum. 8. Bilateral thalamus/hypothalamus at mammillary bodies (left inked black). 9. Midbrain (left inked black). 10. Pons (left inked black). 11. Medulla (left inked black). 12. Left cerebellum/dentate nucleus. 13. Medullary-cervical junction (left inked black). 14. Right hippocampus. 15. Right medial occipital lobe. 16. Right frontal lobe white matter. 17. Right dorsal parietal lobe. 18. Right middle cerebral artery. 19. Bilateral posterior cerebral arteries (left inked black). All sections were processed in paraffin; slides were stained with H & E. This material was reviewed in conference by staff of the Department of Neuropathology and Ophthalmic Pathology.

Microscopic sections show extensive infarction of cerebral cortex, white matter, basal ganglia and thalamus within right middle cerebral artery territory, with acute neuronal injury, scattered macrophages, patchy neutrophils, coagulation necrosis, and vacuolation of neuropil/white matter. No significant subarachnoid hemorrhage is identified. No ventricular hemorrhage is seen. Scattered small intraparenchymal perivascular hemorrhages are present. The histologic appearance is consistent with infarct that has been approximately one week or less in duration. The right middle cerebral artery contains organizing thrombus with fibrin deposition and adherence to vessel wall. Cerebral vessels show atherosclerosis and arteriolosclerosis. Parenchymal hemorrhages are noted in midbrain and rostral pons.

(b)(6)

## SUBSPECIALTY CONSULTATION: CARDIOVASCULAR PATHOLOGY

### FINAL DIAGNOSIS

**DIAGNOSIS:** (b)(6) **Heart, post mortem examination: Cardiomegaly**

History: Male detainee (date of birth unknown) admitted to 344th Field Hospital 12/31/05 with signs and symptoms of stroke; subject die(b)( 06.

Heart: 400 grams, predicted normal 310 grams for 138 pound male; normal epicardial fat; closed foramen ovale; left ventricular cavity diameter 30 mm, left ventricular free wall thickness 13 mm, ventricular septum thickness 15 mm, right ventricle thickness 4 mm without gross scars or abnormal fat infiltrates; mildly thickened and redundant tricuspid valve, other valves grossly unremarkable; endocardium grossly unremarkable; no gross myocardial fibrosis or necrosis; histologic sections show focal microscopic subepicardial scarring; there are no inflammatory cell infiltrates, myocyte necrosis, or cardiomyopathic changes.
Coronary arteries: Normal ostia, right dominance; focally mild coronary atherosclerosis
Left anterior descending artery: 30% luminal narrowing by pathologic intimal thickening
Right coronary artery: 30% luminal narrowing by pathologic intimal thickening

Comment: There is focal microscopic subepicardial scarring, the significance of which is unknown.

Thank you for sending this case for our review. Case seen in conference.

(b)(6)

Staff pathologist

Blocks made: 7
Slides made: 7 H&E, 6 Movat

## OPINION

This detainee died of cerebral vascular disease, specifically, of thrombotic occlusion of the right middle cerebral artery and ischemic changes of the central nervous system structures it supplies. Cardiomegaly and nephrosclerotic changes support the interpretation that the decedent had hypertensive disease of long standing.

Despite extensive and detailed examination, there is no evidence of trauma or injury. The identification of lidocaine and a benzodiazepine in the urine are consistent with the detainees status as a hospitalized patient with cardiac instability and possibly seizures.

The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

(b)(6)

(b)(6) Medical Examiner

# CERTIFICATE OF DEATH *(OVERSEAS)*
## Acte de décès (D'Outre-Mer)

| NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Social |
|---|---|---|---|
| BTB Ghadban, Talib, E | | Not applicable - oth | (b)(6) |

| ORGANIZATION Organisation | NATION (e.g. United States) Pays | DATE OF BIRTH Date de naissance | SEX Sexe |
|---|---|---|---|
| | Iraq | | [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS État Civil | | RELIGION Culte | |
|---|---|---|---|---|---|
| | CAUCASOID Caucasique | | SINGLE Célibataire | | DIVORCED Divorcé |
| | NEGROID Negroide | | MARRIED Marié | | SEPARATED Séparé |
| X | OTHER (Specify) Autre (Spécifier) | | WIDOWED Veuf | | PROTESTANT Protestant |
| | | | | | CATHOLIC Catholique |
| | | | | | JEWISH Juif |
| | | | | X | 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 CONDITON DIRECTLY LEADING TO DEATH [1] Maladie ou condition directement responsable de la mort. | Pending | |
| ANTECEDENT CAUSES — MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| Symptômes précurseurs de la mort. — UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| OTHER SIGNIFICANT CONDITIONS [2] Autres conditions significatives [2] | | |

| 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 |
|---|---|---|
| [ ] NATURAL Mort naturelle | [X] YES Oui [ ] NO Non | Mode of Death : Pending |
| [ ] ACCIDENT Mort accidentelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| [ ] SUICIDE Suicide | NAME OF PATHOLOGIST Nom du pathologiste (b)(6) | |
| [ ] HOMICIDE Homicide | (b)(6) DATE Date 15 January 2006 | AVIATION ACCIDENT Accident à Avion [ ] YES Oui [X] NO Non |

| DATE OF DEATH (day, month, year) Date de décès (le jour, le mois, l'année) | PLACE OF DEATH Lieu de décès |
|---|---|
| (b)(6) 2006 | |

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 dé funtet 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 médicin militaire ou du médicin sanitaire | TITLE OR DEGREE Titre ou diplômé |
|---|---|
| (b)(6) | Medical Examiner |

| GRADE Grade | INSTALLATION OR ADDRESS Installation ou adresse |
|---|---|
| (b)(6) | Dover AFB, Dover DE |
| DATE Date 18 JAN 06 | (b)(6) |

[1] State disease, injury or complication which caused death.
[2] State conditions contributing to the death, but not related t
[1] Préciser la nature de la maladie, de la blessure ou de la c
[2] Préciser la condition qui a contribué à la mort, mais n'ayan

REPLACES DA FORM 3565, 1 JAN 72 AND DA FORM 3565-R(PAS), 28 SEP 73, WHICH ARE OBSOLETE.

DD FORM 1 APR 77 2064

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

# FINAL AUTOPSY EXAMINATION REPORT

Name: BTB Mohamed, Hamed Ali
ISN: (b)(6)
Date of Birth: (b)(6) 1952
Date of Death: (b)(6) 2006
Date of Autopsy: 15 FEB 2006 @ 1000
Date of Report: 29 JUN 2006

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

**Circumstances of Death:** Reportedly, this Iraqi civilian detainee was assaulted by fellow detainees.

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

**Identification:** Presumptive identification is established by accompanying identification tag and documentation. Fingerprints and DNA are taken to compare to exemplars when available.

**CAUSE OF DEATH:** **MULTIPLE BLUNT FORCE INJURIES**

**MANNER OF DEATH:** **HOMICIDE**

**FINAL AUTOPSY DIAGNOSES:**

**I. Multiple Blunt Force Injuries**

A. Head and neck
1. Two abrasions of the forehead, 1 ¼ x 1-inch and ½ x ½-inch and located 1 ½-inches below the top of the head and ¼ left of the anterior midline to ½-inch right of the anterior midline of the head in the anatomic position; with associated subgaleal hemorrhage and multiple linear fractures of the right side of the frontal and right parietal bones
2. Contusion of the right orbit, 3 x 1 ½-inches
3. Subconjunctival hemorrhage
4. Discontinuous abrasion of the right cheek and nose, 1 x ½-inch and located 6-inches below the top of the head and 1-inch right of the anterior midline of the head in the anatomic position
5. Rectangular, patterned contusion of the right cheek, 3 x 2-inches located 6 ½-inches below the top of the head and 2 ¾-inches right of the anterior midline of the head in the anatomic position, with associated contusion of the buccal mucosa and fracture of the right zygoma
6. Discontinuous, irregular abrasion of the posterior scalp, 3 ¾ x 2-inches, located 2-inches below the top of the head and on the posterior midline of the head in the anatomic position
7. Two contusions of the anterior neck, ¼ x ¼-inch (located 10 ¾-inches below the top of the head and ½-inch left of the anterior midline of the neck in the anatomic position) and 1 x ½-inch (located 11 ½-inches below the top of the head and on the anterior midline of the neck in the anatomic position) and associated hemorrhage of the inferior aspect of the left sternohyoid muscle and hemorrhage of the right submandibular soft tissue
8. Acute subdural hemorrhage, left temporal region
9. Diffuse subarachnoid hemorrhage
10. Multiple contusions of the brain: right orbito-frontal region, left inferior temporal region, bilateral occipital lobes, bilateral cerebellar hemispheres

B. Torso
1. Irregular, outline patterned abrasion of the right chest, 4 x 3-inches, located 13 ¾-inches below the top of the head and 1 ¾-inches right of the anterior midline of the torso in the anatomic position, with an associated rectangular pattern 3 x 2-inch contusion 13 ¾-inches below the top of the head and 5 ½-inches right of the anterior midline of the head in the anatomic position
2. Abrasion of the upper left chest, 1 x ¼-inches, located 16 ½-inches below the top of the head and 1 ¾-inches left of the anterior midline of the torso in the anatomic position

3. Irregular outline patterned abrasion of the lower left chest, 4 x 1 ¼-inches, located 19 ½-inches below the top of the head and 7-inches left of the anterior midline of the torso in the anatomic position
4. Linear abrasion of the lower left back, 4 ¾ x 1/8-inch, located 22 ½-inches below the top of the head and 6 ¾-inches left of the posterior midline of the torso in the anatomic position, with associated underlying soft tissue hemorrhage
5. Multiple left rib fractures: 2nd through 4th anterior, 2nd through 9th lateral and 2nd posterior left ribs with associated left hemothorax (400-milliliters of liquid blood)
6. Fracture of the body of the sternum
7. Hemorrhage of the soft tissues surrounding the second thoracic vertebra, bilaterally
8. Capsular hematoma of the inferior right lobe of the liver
9. Hemorrhage of the left peri-renal soft tissues

C. Extremities
1. Abrasion of the anterior right forearm, ¾ x ½-inch, located 7-inches below the elbow and ½-inch lateral to the anterior midline of the right upper extremity in the anatomic position, with an associated 2 x 1-inch ecchymosis
2. Contusion of the posterior right forearm, 1 x ¼-inch, located 5-inches below the elbow and 1 ¾-inches medial to the posterior midline of the right upper extremity in the anatomic position with associated soft tissue hemorrhage
3. Contusion of the dorsum of the left hand, 1 ¼ x ¾-inch, located 12 ¼-inches below the elbow and 1 ¼-inches lateral to the posterior midline of the left upper extremity in the anatomic position
4. Abrasion of the anterior right thigh, 1 x 1/8-inch, located 28 ¾-inches above the heel and 1-inch lateral to the anterior midline of the right lower extremity, with an associated 2 ½ x 2 ½-inch ecchymosis
5. Contusion of the medial right knee, ½ x ½-inch, located 17 ¾-inches above the heel and 4-inches medial to the anterior midline of the right lower extremity, with associated soft tissue edema
6. Cluster of abrasions of the proximal anterior right leg, ranging in size from 1/16-inch to ¼-inch and covering an area ½ x ¼-inch, located 14 ½-inches above the heel and on the anterior midline of the right lower extremity
7. Contusion of the medial right leg, 1 x ½-inch, located 13 ¾-inches above the heel and 3 ¾-inches medial to the anterior midline of the right lower extremity
8. Contusion of the right popliteal fossa, 7 ¼ x 4 ¼-inches, located 14 ¼-inches above the heel and 1-inch medial to the posterior midline of the right lower extremity with associated soft tissue hemorrhage into the posterior thigh
9. Faint contusion of the left knee, 1 x 1-inch, located 17 ½-inches above the heel and 3-inches medial to the anterior midline of the left lower extremity

10. Square 2 x 2 patterned contusion of the left popliteal fossa, 4 ¼ x 4-inches, located 15 ¾-inches above the heel and on the posterior midline of the left lower extremity
11. Fractures of the medial condyle of the right humerus and olecranon process of the right ulna with associated soft tissue edema and ecchymoses of the right elbow (4 x 2 ½-inches) and right antecubital fossa (3 ¾ x 3 ½-inches)
12. Fracture of the olecranon process of the left ulna with associated soft tissue edema and 4 ¾ x 4-inch ecchymosis of the left antecubital fossa

**II. Natural Disease**

A. Mild to moderate anthracosis
D. Severe two-vessel coronary atherosclerosis
   1. The proximal left anterior coronary artery has 90% luminal narrowing
   2. The proximal right coronary artery has 75% luminal narrowing
B. Moderate atherosclerosis of the abdominal aorta
C. Mild hepatic steatosis
D. Bilateral nephrosclerosis (gross)
E. Cyst of the left kidney

**III. Evidence of Medical Intervention**

A. Endotracheal tube
B. Cardiac monitor leads: both shoulders, left lateral torso, abdomen, and both thighs
C. Urinary bladder catheter
D. Triple lumen catheter, right groin
E. Splints with elastic wraps, both upper extremities
F. Double lumen catheter, right hand

**IV. Minimal decomposition**

**V. Toxicology**

A. The blood is tested for carboxyhemoglobin and none is found
B. The blood is tested for cyanide and none is found
C. The blood and vitreous fluid are tested for ethanol and none is found
D. The blood is screened for medications and drugs of abuse and Atropine is detected but is not quantitated in the blood

## EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished appearing 68-inch, 146-pound male whose appearance is consistent with the reported age of 53 years. Lividity is posterior and fixed. Rigor is equal in all extremities, and the temperature is that of the refrigeration unit.

The scalp is covered with short gray hair in a male pattern baldness distribution. The irides are blue, the pupils are round and equal in diameter and the corneas are cloudy. There is subconjunctival hemorrhage present at the right lateral canthus. The external auditory canals are clear. The ears are unremarkable. The nares are patent and the lips are atraumatic. The nose and maxillae are palpably stable. The teeth appear natural and in fair condition, with remote loss of the left upper central incisor.

The neck is straight, and the trachea is midline and mobile. The chest is asymmetric. 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.

## CLOTHING AND PERSONAL EFFECTS

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

- Blue hospital gown

## MEDICAL INTERVENTION

- Endotracheal tube
- Cardiac monitor leads: both shoulders, left lateral torso, abdomen, and both thighs
- Urinary bladder catheter
- Triple lumen catheter, right groin
- Splints with elastic wraps, both upper extremities
- Double lumen catheter, right hand

## RADIOGRAPHS

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

- Fracture of the right zygomatic process
- Fractures of the right side of the frontal bone and the right parietal bone
- Multiple left rib fractures
- Fractures of the olecranon process of the right ulna and the medial condyle of the right humerus
- Fracture of the olecranon process of the left ulna

## EVIDENCE OF INJURY

The ordering of the following injuries is for descriptive purposes only, and is not intended to imply order of infliction or relative severity.

## I. Blunt Force Injuries

A. Head and Neck

There are two abrasions of the right forehead which measure 1 ¼ x 1-inch and ½ x ½-inch and are located 1 ½-inches below the top of the head and ¼-inch left to ½-inch right of the anterior midline of the head in the anatomic position. Underlying these abrasions is galeal and subgaleal hemorrhage and multiple linear fractures of the right side of the frontal and right parietal bones. There are multiple contusions of the brain that are located in the right orbito-frontal region, the left inferior temporal region, both occipital lobes and both cerebellar hemispheres. There is a small (less than 5-milliliters) subdural hematoma overlying the left temporal lobe, and a diffuse subarachnoid hematoma that is distributed over the superior cerebral hemispheres bilaterally.

There is a 3 x 2-inch rectangular, patterned contusion of the right cheek, located 6 ½-inches below the top of the head and 2 ¾-inches right of the anterior midline of the head in the anatomic position, with associated contusion of the buccal mucosa and fracture of the right zygomatic process. There is a 1 x ½-inch discontinuous abrasion of the right cheek and nose, located 6-inches below the top of the head and 1-inch right of the posterior midline of the head in the anatomic position. There is a 3 x 1 ½-inch right periorbital contusion with an associated subconjunctival hemorrhage at the right lateral canthus. There is a discontinuous, 3 ¾ x 2-inch irregular abrasion of the posterior scalp, located 2-inches below the top of the head and on the posterior midline of the head in the anatomic position.

There are two contusions of the anterior neck which measure 1 x ½-inch (located 11 ½-inches below the top of the head and on the anterior midline of the neck in the anatomic position) and ¼ x ¼-inch (located 10 ¾-inches below the top of the head and ½-inch left of the anterior midline of the neck in the anatomic position). Associated with these contusions are hemorrhage of the inferior aspect of the left sternohyoid muscle and hemorrhage of the right submandibular soft tissue

B. Torso

There is a faint, 1 x ¼-inch abrasion on the left chest, located 16 ½-inches below the top of the head and 1 ¾-inches left of the anterior midline. On the lower left chest, located 19 ½-inches below the top of the head and 7-inches left of the anterior midline, is a 4 x 1 ¼-inch irregular outline patterned abrasion. There is a 4 x 3-inch irregular outline patterned abrasion on the right chest located 13 ¾-inches below the top of the head and 1 ¾-inches right of the anterior midline, with an associated rectangular pattern 3 x 2-inch contusion located 13 ¾-inches below the top of the head and 5 ½-inches right of the anterior midline of the torso in the anatomic position. On the left back, located 22 ½-inches below the top of the head and 6 ¾-inches left of the

posterior midline, is a 4 ¾ x 1/8-inch linear abrasion with underlying subcutaneous hemorrhage.

The left chest is externally markedly deformed with multiple underlying rib fractures; the 2nd through 4th anterior left ribs (cannot exclude medical intervention), the 2nd through 9th lateral left ribs and the 2nd posterior left rib are fractured with associated left hemothorax (400-milliters of liquid blood). The body of the sternum is fractured (cannot exclude medical intervention). There is a small capsular hematoma of the inferior right lobe of the liver, and there is a small left peri-renal soft tissue hemorrhage. There is focal soft tissue hemorrhage of the back at the level of the 2nd thoracic vertebra.

C. Extremities

1. Right Upper Extremity
   There are fractures of the medial condyle of the right humerus and the olecranon of the right ulna with associated soft tissue edema and a 4 x 2 ½-inch ecchymosis. There is also a 3 ¾ x 3 ½-inch ecchymosis in the right antecubital fossa, located 12 ¾-inches below the top of the shoulder and on the anterior midline of the right upper extremity.

   On the anterior right forearm, located 7-inches below the elbow and ½-inch lateral to the anterior midline of the forearm is a ¾ x ½-inch abrasion and associated 2 x1-inch ecchymosis. There is a 1 x ¼-inch contusion on the posterior right forearm, located 5-inches below the elbow and 1 ¾-inches medial to the posterior midline of the right forearm and associated soft tissue hemorrhage.

2. Left Upper Extremity
   There is a fracture of the proximal left ulna (olecranon) with associated soft tissue edema. There is also a 4 ¾ x 4-inch ecchymosis in the left antecubital fossa, located 12 ¼-inches below the top of the shoulder and on the anterior midline of the left upper extremity.

   There is a 1 ¼ x ¾-inch contusion on the dorsum of the left hand, located 12 ¼-inches below the elbow and 1 ¼-inch lateral to the posterior midline of the left upper extremity.

3. Right Lower Extremity
   There is a 1 x 1/8-inch abrasion on the anterior right thigh, located 28 ¾-inches above the heel and 1-inch lateral to the anterior midline of the right lower extremity; there is also a 2 ½ x 2 ½-inch ecchymosis associated with this abrasion. On the medial surface of the right knee, there is a ½ x ½-inch contusion located 17 ¾-inches above the heel and 4-inches medial to the anterior midline of the right lower extremity.

On the proximal anterior right leg, there is a cluster of abrasions which range in size from 1/16 to ¼-inch covering an area of ½ x ¼-inch, located 14 ½-inches above the heel and on the anterior midline of the right lower extremity. On the medial right leg, there is a 1 x ½-inch contusion located 13 ¾-inches above the heel and 3 ¾-inches medial to the anterior midline of the right lower extremity.

In the right popliteal fossa, there is a 7 ¼ x 4 ¼-inch contusion located 14 ¼-inches above the heel and 1-inch medial to the posterior midline of the right lower extremity.

4. Left Lower Extremity
There is a 1 x 1-inch faint contusion with a faint pattern on the medial left knee, located 17 ½-inches above the heel and 3-inches medial to the anterior midline of the left lower extremity.

In the left popliteal fossa, there is a 4 ¼ x 4-inch contusion with a square 2 x 2 pattern located 15 ¾-inches above the heel and on the posterior midline of the left lower extremity.

## INTERNAL EXAMINATION

HEAD:
Injuries to the head are described above (see "Evidence of Injury, I.A." above). The brain weighs 1,340-grams and is submitted for Neuropathology consultation. See the attached Neuropathology consult addendum for complete details.

NECK:
Layer-wise dissection reveals that the anterior strap muscles of the neck are homogenous and red-brown; there is hemorrhage at the base of the left sternohyoid muscle. The thyroid cartilage and hyoid bone are intact. The larynx is lined by intact white mucosa. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The tongue is free of bite marks, hemorrhage, or other injuries.

Incision and dissection of the posterior neck demonstrates no deep paracervical muscular injury and no cervical spine fractures.

BODY CAVITIES:
The vertebral bodies are visibly and palpably intact. Injuries and changes involving the ribs, sternum and left pleural cavity are described above (see "Evidence Injury, I.B."). There is no excess fluid is in the right pleural, pericardial, or peritoneal cavities. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs weigh 590 and 610-grams, respectively. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and

edematous with anthracotic pigment. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:
The 430-gram heart is submitted for Cardiovascular Pathology consultation. See the attached Cardiovascular Pathology consult addendum for complete details.

LIVER & BILIARY SYSTEM:
The 1,170-gram liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is yellow-tan to brown and congested, with the usual lobular architecture. Injury to the liver is described above (see "Evidence of Injury, I.B."). The gallbladder contains a minute amount of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

LYMPHORETICULAR SYSTEM:
The 170-gram spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles. The regional lymph nodes appear normal in size; the carinal lymph nodes contain anthracotic pigment.

PANCREAS:
The pancreas is firm and yellow-tan, with the usual lobular architecture. 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 120 and 110-grams, respectively. Injuries to the kidneys are described above (see "Evidence of Injury, I.B"). The external surfaces are intact and granular, with a fluid-filled cyst at the left upper pole. The cut surfaces are red-tan and congested, with uniformly thick cortices and sharp cortico-medullary junctions. The pelves are unremarkable and the ureters are normal in course and caliber. Pink-grey bladder mucosa overlies an intact bladder wall. The bladder contains no urine. The prostate gland 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 50-milliliters of brown fluid. The gastric wall is intact. The duodenum, loops of small bowel and colon are unremarkable. The appendix is present.

MUSCULOSKELETAL SYSTEM:
No non-traumatic abnormalities of the muscles, bones or joints are noted.

## MICROSCOPIC EXAMINATION

Selected portions of organs are retained in formalin.

BRAIN:

See the attached Neuropathology consult addendum for complete details.

HEART:

See the attached Cardiovascular Pathology consult addendum for complete details.

## ADDITIONAL PROCEDURES

- Documentary photographs are taken by AFMES photographers
- Specimens retained for toxicological testing and/or DNA identification are: vitreous, blood, spleen, liver, lung, kidney, bile, gastric contents, adipose tissue and psoas muscle
- The body is sutured closed without embalming and the dissected organs are forwarded with body
- There are no personal effects

## OPINION

This 53-year-old Iraqi civilian detainee (b)(6) died as a result of multiple blunt force injuries he received in unclear circumstances. Severe injuries to the head, torso and extremities were present in locations which are unlikely to have been self-inflicted or in an accidental manner. Both elbow joints were fractured in an unusual manner (olecrenon fractures) that suggests deliberate assault by another person or persons. Contusion and soft tissue hemorrhage of the right forearm suggests that the deceased was bound around the time the injuries were inflicted; at least 20 separate and distinct blunt force injuries are observed. Toxicological testing was negative for ethanol, carboxyhemoglobin, cyanide and drugs of abuse. Atropine (a medication used in resuscitation procedures) was detected but not quantitated in the blood. The manner of death is homicide.

(b)(6)

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

(b)(6)

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

**ADDENDUM 1: NEUROPATHOLOGY CONSULTATION REPORT**
**(PAGE 1 OF 2)**

This material was reviewed in conference on 1 Jun 06.

Brain, autopsy: Multifocal traumatic injuries: 1.Hemorrhagic contusions, acute, right orbito-frontal region, left inferior temporal gyrus, bilateral occipital lobes, and bilateral cerebellar hemispheres.
2. Subarachnoid hemorrhage, acute, diffuse.
3. Subdural hematoma, acute, left temporal region.
4. Arteriolosclerosis, mild.
5. Hypoxic/ischemic changes.

We examined the approximately 1350-gram formalin-fixed brain submitted in reference to this case.

Slightly adherent subdural hemorrhage is noted in the area of the left temporal lobe. Subarachnoid hemorrhage is present over the convexities of the cerebral hemispheres. Diffuse, mild gyral flattening and sulcal narrowing is noted over both cerebral hemispheres; otherwise, the gyral pattern is normal. The cranial nerves are unremarkable. The circle of Willis was dissected from the base of the brain and found to have a normal adult configuration without aneurysms, significant atherosclerosis, or sites of occlusion. Cortical contusions are identified as follows: a 1.5 x 0.8 cm lesion involving the right anterior gyrus rectus and olfactory sulcus with focal extension into the medial, inferior frontal pole; a 0.8 x 0.8 cm contusion on the right orbital surface; a 1.5 x 1 cm lesion on the inferior-lateral surface of the left inferior temporal gyrus; a 6 x 4 cm left occipital lobe lesion, which extends into the occipital pole; multifocal contusions on the right occipital pole, ranging in size from 0.4 cm to 2.0 cm; a 3 x 2 cm left cerebellar lesion; and a 4 x 2 cm right cerebellar contusion. There is no evidence of tonsillar, uncal, or subfalcine herniation. The brainstem is unremarkable.

**ADDENDUM 1: NEUROPATHOLOGY CONSULTATION REPORT**
**(PAGE 2 OF 2)**

Serial coronal sections of the cerebrum confirm the presence of the previously described contusions; otherwise, the cortical ribbon is of normal thickness, well demarcated from subjacent white matter. A focal area of dusk discoloration is identified in the medial left occipital lobe cerebral cortex. Myelination is normal. The ventricular system is normal shape and size. The basal ganglia, hippocampi, thalami, and hypothalamus are unremarkable. Serial sectioning of the cerebellum reveals diffuse dusky discoloration of the folia and confirms the presence of the previously described contusions. The substantia nigra and locus ceruleus are normally pigmented for age. The aqueduct is slit-like. The spinal cord is not submitted, but the uppermost cervical cord and cervicomedullary junction are unremarkable.

Summary of microscopic sections: 1. Right gyrus rectus contusion. 2. Right orbital-frontal contusion. 3. Right superior frontal gyrus subarachnoid hemorrhage. 4. Left superior parietal subarachnoid hemorrhage. 5. Left inferior temporal gyrus contusion. 6. Left occipital lobe contusion. 7. Right occipital lobe contusion. 8. Left medial occipital lobe. 9. Left caudate/putamen. 10. Left putamen/globus pallidus. 11. Thalamus. 12. Left corpus callosum and periventricular area. 13. Left hippocampus. 14. Midbrain. 15. Pons. 16. Cerebellum. 17. Right cerebellar contusion. 18. Left cerebellar contusion. 19. Medulla. 20. Cervicomedullary junction. 21. Dura.

The tissue was processed in paraffin; a section prepared from each paraffin block was stained with H&E.

Microscopic sections from the left dura demonstrate intact red cells on the subdural surface, consistent with an acute subdural hemorrhage. Sections from the right superior frontal gyrus, left superior parietal lobe, mamillary body, left inferior temporal lobe, cerebellum, and brainstem show intact red cells without an associated inflammatory reaction within the leptomeninges, corresponding to acute subarachnoid hemorrhage.

Sections from the right orbital-frontal region, left temporal lobe, and bilateral occipital lobes demonstrate acute hemorrhage and vacuolation within the cerebral cortex, consistent with acute cortical contusions and associated edema. Scattered hypereosinophilic neurons are noted, which are indicative of acute hypoxic/ischemic neuronal injury. Rare Hirano bodies and granulovacuolar degeneration are identified in the left hippocampus, consistent with non-specific neurodegenerative changes. Arteriolosclerosis with associated scattered perivascular hemosiderin- laden macrophages is also noted.

Sections from both cerebellar hemispheres show acute hemorrhage and focal collections of neutrophils within the folia, consistent with acute contusions. Hypereosinophilic Purkinje cells are identified corresponding to hypoxic/ischemic changes.

(b)(6)

**ADDENDUM 2: CARDIOVASCULAR PATHOLOGY CONSULTATION REPORT (PAGE 1 OF 1)**

## FINAL DIAGNOSIS

**DIAGNOSIS:** (b)(6) **Heart, post mortem examination: Severe coronary atherosclerosis, two vessel disease, 90% luminal narrowing of proximal left anterior descending artery with healed plaque rupture and 75% narrowing of proximal right coronary artery**

History: Iraqi male detainee, date of birth unknown; sternal and rib fractures, rule out myocardial contusions

Heart: 425 grams; normal epicardial fat with no contusions seen on the external surface of the heart; closed foramen ovale; normal cardiac chamber dimensions: left ventricular cavity diameter 30 mm, left ventricular free wall thickness 14 mm, ventricular septum thickness 14 mm, right ventricle thickness 4 mm, without gross scars or abnormal fat infiltrates; valves and endocardium grossly unremarkable; no gross myocardial necrosis or fibrosis; histologic sections show mild left ventricular myocyte hypertrophy with focal interstitial and replacement fibrosis, focal myofiber disarray and rare basophilic degeneration of myocytes

Coronary arteries: Normal ostia; right dominance; focally severe coronary atherosclerosis

Left anterior descending artery (LAD): 90% narrowing of proximal LAD by fibrocalcific plaque with healed plaque rupture

Right coronary artery (RCA): 75% narrowing of proximal RCA by fibroatheromatous plaque

(b)(6)

Staff pathologist

Blocks made: 7 (5 heart, 2 coronary arteries)
Slides made: 9 (7 H&E, 2 Movat)

# CERTIFICATE OF DEATH *(OVERSEAS)*

Acte de décès (D'Outre-Mer)

| NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Social |
|---|---|---|---|
| BTB Mohamed, Hamed Ali, | | Civilian | (b)(6) |
| **ORGANIZATION** Organisation | **NATION** (e.g. United States) Pays | **DATE OF BIRTH** Date de naissance | **SEX** Sexe |
| | Iraq | (b)(6) 1952 | [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS État Civil | | | RELIGION Culte | | |
|---|---|---|---|---|---|---|---|
| [X] | CAUCASOID Caucasique | [ ] | SINGLE Célibataire | [ ] DIVORCED Divorcé | [ ] | PROTESTANT Protestant | [X] OTHER (Specify) Autre (Spécifier) |
| [ ] | NEGROID Negroide | [ ] | MARRIED Marié | [ ] SEPARATED Séparé | [ ] | CATHOLIC Catholique | |
| [ ] | OTHER (Specify) Autre (Spécifier) | [ ] | WIDOWED Veuf | | [ ] | 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 [1] Maladie ou condition directement responsable de la mort | Pending | |
| ANTECEDENT CAUSES Symptômes précurseurs de la mort — MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| ANTECEDENT CAUSES Symptômes précurseurs de la mort — UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| OTHER SIGNIFICANT CONDITIONS [2] Autres conditions significatives [2] | | |

| 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 |
|---|---|---|
| [ ] NATURAL Mort naturelle | [X] YES Oui [ ] NO Non | Mode of Death : Pending |
| [ ] ACCIDENT Mort accidentelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| [ ] SUICIDE Suicide | NAME OF PATHOLOGIST Nom du pathologiste (b)(6) | |
| [ ] HOMICIDE Homicide | (b)(6) DATE Date 15 February 2006 | AVIATION ACCIDENT Accident d'Avion [ ] YES Oui [X] NO Non |

DATE OF DEATH (day, month, year) Date du décès (jour, mois, 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 dé funt; 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 examinateur | TITLE OR DEGREE Titre ou diplôme |
|---|---|
| (b)(6) | Medical Examiner |
| GRADE Grade (b)(6) | INSTALLATION OR ADDRESS Installation ou adresse Dover AFB, Dover DE |
| DATE Date 03MAY06 | (b)(6) |

[1] State disease, injury or complication which caused death.
[2] State conditions contributing to the death, but not related
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort mais non la maladie qui a causé la mort, telle qu'un arrêt du cœur, etc.
[2] Préciser la condition qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou à la condition qui a provoqué la mort.

DD FORM 1 APR 77 2064 REPLACES DA FORM 3565, 1 JAN 72 AND DA FORM 3565-R(PAS), 26 SEP 75, WHICH ARE OBSOLETE.

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

# AUTOPSY REPORT

Name: RAZZAK, Abdul
ISN: (b)(6)
Date of Birth: not known
Date of Death: (b)(6) 2007
Place of Death: Naval Hospital Guantanamo Bay, Cuba
Place of Autopsy: Naval Hospital Guantanamo Bay, Cuba

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Civilian

Date and time of Autopsy: 30 DEC 2007 12:00 AM
Date of Report: 20 FEB 2008

**Circumstances of Death:** This detainee succumbed to multi-system organ failure complicating metastatic colon cancer despite appropriate adjuvant therapy

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

**Identification:** presumptive identity is established by continuous maintenance in custody from time of apprehension

**CAUSE OF DEATH: MULTISYSTEM ORGAN FAILURE DUE TO CARCINOMATOSIS**

**MANNER OF DEATH: NATURAL**

## EXTERNAL EXAMINATION

The body is that of a normally developed, cachectic appearing male, 65 inches long, weighing an estimated 110 pounds, and older in appearance than the recorded age of 60 years. Lividity is posterior. Rigor is resolving. The body is cool to touch.

Gray-black hair up to 1/2 inch in length covers the scalp in the usual male pattern of distribution. The sclerae are icteric; the irides are brown; and the pupils are round, 0.3 cm and equal in diameter. The external auditory canals are clear; the ears are unremarkable. The nares are patent and the lips are atraumatic. The nose and maxillae are palpably stable. A gray-black moustache and full beard are present. The teeth are worn, and a prosthodontic appliance is appropriately positioned where teeth are missing.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. The abdomen is scaphoid. An obliquely oriented 1-1/2 inch scar is noted on the surface of the right lower abdominal quadrant. Additionally, grouped petechiae are present over the right lower quadrant. Grouped petechiae are also present over the back and are aggregated into three large groups ranging from 2 x 1 inch up to 14 x 5 inches. Within the groups, petechiae vary in configuration from individual punctate lesions to coalescent foci. The genitalia are those of a normal adult circumcised male. The testes are descended and free of masses. Pubic hair is present in the usual male distribution. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric. Petechiae are present in the left antecubital fossa. There are no palpable cords in the popliteal fossae. There is mild edema of the hands and feet.

## CLOTHING AND PERSONAL EFFECTS

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

- white robe

## MEDICAL INTERVENTION

Sites of EKG lead placement shaved
EKG leads appropriately deployed over the precordium
Intravenous access site, dorsal right hand
Presumptive venipuncture site right antecubital fossa (taped 2 x 2 inch gauze sponge, right antecubital fossa
Hospital identification band on left wrist
Hospital identification band on right ankle
Medical chart entries documenting inpatient and outpatient care, including chemotherapy
For pain and nausea control agents identified, see "Toxicology"

## RADIOGRAPHS

A complete set of postmortem radiographs is obtained. The results are consistent with the findings described herein.

## 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 cerebral blood vessels are unremarkable. Clear cerebrospinal fluid surrounds the 1324 gm 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:
On layer-wise dissection of the anterior and posterior neck, there is no hemorrhage or other evidence of trauma. The anterior strap muscles of the neck are homogenous and red-brown. 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 are 40 cc of straw-colored fluid in the right pleural space and 60 cc in the left. In excess of 600 cc of fluid is found in the peritoneal cavity. There is no excess fluid is in the pericardial sac. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
Dense adhesions envelop the lungs and tether them to the parietal pleural surfaces. The underlying lung surfaces are heavily anthracotic. The lungs are markedly edematous with deep purple congested cut surfaces: the right lung weighs 1145 gm, and the left lung weighs 782 gm. Nodular densities described as being seen in clinical (pre-mortem) imaging studies are not evident grossly.

CARDIOVASCULAR SYSTEM:
The 270 gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross section of the vessels shows negligible focal atheromatous narrowing. The myocardial cut surface is uniformly dark brown. The valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.0 and 0.3 cm thick, respectively. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 3400 gm liver is markedly distorted by multiple gray tan nodular masses, ranging from less than 1/16 inch up to 7 inches in maximal dimension. The residual hepatic parenchyma is focally compressed and stained yellow. The gallbladder contains a 50 cc of viscous green-black bile. There are no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 108 gm spleen has a thickened fibrous capsule, with focal gray tan discoloration of the usual red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

PANCREAS:
The pancreas is firm and yellow, with prominent lobulation.. 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 120 and 130 gm, respectively. The external surfaces are intact and smooth except for a 0.4 cm cortical cyst of the right kidney, with red-tan cut surfaces, 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 urinary bladder contains less than 200 cc of clear amber 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 in excess of 100 cc of partially digested food. The gastric wall is intact. The duodenum and loops of small bowel are unremarkable. On section of the recto-sigmoid colon, a 2.9 cm tumor mass is identified on the mucosal surface and grossly appears to extend into the surrounding pericolic tissue, and includes a firm 1.4 cm nodular structure grossly consistent with a lymph node. The remaining colon is unremarkable. The appendix appears to have been partially amputated in the remote past.

MUSCULOSKELETAL SYSTEM:
Muscle development is normal. No bone or joint abnormalities are noted.

## MICROSCOPIC EXAMINATION

Central Nervous System (slides 5 & 6):
No significant histopathologic alteration

Liver (slide 1):
Metastatic adenocarcinoma, moderate-to-poorly differentiated

Hematopoietic- Lymphoid incl. Spleen (slides 2 & 3):
1. **Regional lymph node positive for Metastatic adenocarcinoma, moderate-to-poorly differentiated**
2. **Spleen: no significant histopathologic alteration**

Gastro-Intestinal (slides 2 & 8):
1. **Recto-sigmoid colon (site of primary tumor): moderate-to-poorly differentiated adenocarcinoma, with extension into pericolic adipose tissue**
2. **Gastro-intestinal tissue remote from primary tumor:**
   a. **No significant histopathologic alteration**
   b. **Diffuse autolytic change**

Heart (slide 4):
No significant histopathologic alteration

Lung (slide 3):
No significant histopathologic alteration

Genito-urinary (7):
No significant histopathologic alteration

Endocrine (slide 7):
No significant histopathologic alteration

## ADDITIONAL PROCEDURES

1. Documentary photographs are taken by OAFME staff photographers.
2. Specimens retained for toxicologic testing and/or DNA identification are: vitreous fluid, blood, bile, gastric contents, urine, brain, lung, liver, kidney, spleen, skeletal muscle and adipose tissue.
4. The dissected organs are forwarded with body.
5. Personal effects are released to the appropriate mortuary operations representatives.

## AUTOPSY DIAGNOSES

**I. Evidence of Multi-system Organ Failure**

A. Hepatic failure
   1. Scleral icterus
   2. Features of bleeding diathesis
   3. Ascites

B. Cardiac failure
   1. Edema of hands and feet
   2. Bilateral pulmonary effusions

**II. Primary Colo-rectal Tumor**

A. Tumor: 2.9 cm in maximal dimension
B. Tumor extends through mucosa into pericolic fat
C. Evidence of regional lymph node involvement
D. Stage IV: T4, N1, M1 (AJCC 6th edition)

**III. Metastatic Tumor Spread**

A. Multiple liver nodules identified at postmortem examination
B. Clinical (radiographic) evidence of metastatic tumor nodules in the lungs

**IV. Pre-existing medical Conditions**

Multiple dense pleural adhesions, bilateral

**V. Evidence of Medical Intervention**

A. Sites of EKG lead placement shaved
B. EKG leads appropriately deployed over the precordium
C. Appropriate EKG lead placement
D. Intravenous access site, dorsal right hand
E. Presumptive venipuncture site right antecubital fossa
F. Hospital identification band on left wrist
G. Hospital identification band on right ankle
H. Medical chart entries documenting inpatient and outpatient care, including chemotherapy

**VI. Identifying Features**

A. Well healed surgical scar, right lower abdominal quadrant
B. Dental bridge replaces teeth 7 - 10

## VII. Toxicology

A. Blood and vitreous are negative for ethanol

B. 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

1. acetaminophen was detected in the urine by immunoassay and confirmed by color test. No acetaminophen was detected in the blood at a limit of quantitation of 5 mg/L using immunoassay.
2. oxycodone was detected in the urine by immunoassay and confirmed by gas chromatography/mass spectrometry. The blood contained 0.10 mg/L of oxycodone as quantitated by gas chromatography/mass spectrometry
3. oxymorphone was detected in the urine by immunoassay and confirmed by gas chromatography/mass spectrometry. No oxymorphone was detected in the blood at t limit of quantitation of 0.05 mg/L using gas chromatography/mass spectrometry
4. morphine was detected in the urine by immunoassay and confirmed by gas chromatography/mass spectrometry. The blood contained 0.36 mg/L of morphine as quantitated by gas chromatography/mass spectrometry
5. promethazine was detected in the urine by gas chromatography and confirmed by gas chromatography/mass spectrometry. The blood contained 0.25 mg/L of promethazine as quantitated by gas chromatography/mass spectrometry

VII Post-mortem Changes

No significant postmortem change is noted; mild postmortem changes consist of early corneal clouding , resolving rigor and posterior fixed lividity.

## OPINION

(b)(6) succumbed to multisystem organ failure due to disseminated carcinomatosis. His liver was almost twice the mass expected for a man his size, and consisted predominantly of metastatic tumor nodules. Correspondingly, features of liver failure were prominent at autopsy and consisted of jaundice, ascites and features of a bleeding diathesis. Smaller tumor deposits identified on clinical roentgenograms were not detected at the postmortem exam. His last round of chemotherapy was on the 13th of December. While it is difficult to assess the toxic potential of the decedent's chemotherapy regimen, it is very clear, both from the extensive tumor burden and from the critical organ systems affected, that the overwhelmingly preponderant causal factor in this man's death was carcinoma. The levels of analgesic and antiemetic agents identified on toxicologic analysis of blood and urine indicate that all reasonable efforts were made to control pain and nausea. The cause of death is multisystem organ failure due to carcinomatosis. The manner of death is natural.

(b)(6)

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

# CERTIFICATE OF DEATH *(OVERSEAS)*
## Acte de décès (D'Outre-Mer)

| NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Social |
|---|---|---|---|
| Razzak, Abdul, | | Civilian | (b)(6) |
| **ORGANIZATION** Organisation | **NATION** *(e.g. United States)* Pays | **DATE OF BIRTH** Date de naissance | **SEX** Sexe |
| | Iraq | | [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS État Civil | | | RELIGION Culte | | |
|---|---|---|---|---|---|---|---|
| [X] | CAUCASOID Caucasique | [ ] | SINGLE Célibataire | [ ] DIVORCED Divorcé | [ ] | PROTESTANT Protestant | [X] OTHER (Specify) Autre (Spécifier) |
| [ ] | NEGROID Negroide | [ ] | MARRIED Marié | [ ] SEPARATED Séparé | [ ] | CATHOLIC Catholique | |
| [ ] | OTHER (Specify) Autre (Spécifier) | [ ] | WIDOWED Veuf | | [ ] | JEWISH Juif | |

| NAME OF NEXT OF KIN Nom du plus proche parent | RELATIONSHIP TO DECEASED Parenté du décédé avec le sus |
|---|---|
| STREET ADDRESS Domicilé 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 CONDITON DIRECTLY LEADING TO DEATH [1] Maladie ou condition directement responsable de la mort | Multisystem organ failure due to carcinomatosis | Months |
| ANTECEDENT CAUSES Symptômes précurseurs 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 [2] Autres conditions significatives | | |

| MODE OF DEATH Condition de décès | AUTOPSY PERFORMED Autopsie effectuée [X] YES Oui [ ] NO Non | CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures |
|---|---|---|
| [X] NATURAL Mort naturelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| [ ] ACCIDENT Mort accidentelle | | |
| [ ] SUICIDE Suicide | NAME OF PATHOLOGIST Nom du pathologiste (b)(6) | |
| [ ] HOMICIDE Homicide | SIGNATURE (b)(6) DATE Date 30 December 2007 | AVIATION ACCIDENT Accident à Avion [ ] YES Oui [X] NO Non |

| DATE OF DEATH *(day, month, year)* Date de décès *(le jour, le mois, l'année)* | PLACE OF DEATH Lieu de décès |
|---|---|
| (b)(6) 2007 | Guantanamo Bay Cuba |

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 dé funtet 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 médicin militaire ou du médicin sanitaire | TITLE OR DEGREE Titre ou diplômé |
|---|---|
| (b)(6) | Medical Examiner |
| **GRADE** Grade (b)(6) | **INSTALLATION OR ADDRESS** Installation ou adresse Dover AFB, Dover DE |
| **DATE** Date 5/7/2008 | **SIGNATURE** (b)(6) |

[1] State disease, injury or complication which caused death, but not mode of
[2] State conditions contributing to the death, but not related to the disease or condition causing death.
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort, mais non la manière de mourir, telle qu'un arrêt du coeur, etc.
[2] Préciser la condition qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou à la condition qui a provoqué la mort.

DD FORM 1 APR 77 2064 REPLACES DA FORM 3566, 1 JAN 72 AND DA FORM 3565-R(PAS), 26 SEP 75, WHICH ARE OBSOLETE.

*(REMOVE, REVERSE AND RE-INSERT CARBONS BEFORE COMPLETING THIS SIDE)*

**DISPOSITON OF REMAINS**

| NAME OF MORTICIAN PREPARING REMAINS | GRADE | LICENSE NUMBER AND STATE | OTHER |
|---|---|---|---|
| INSTALLATION OR ADDRESS<br>(b)(6) | DATE | SIGNATURE | |
| NAME OF CEMETERY OR CREMATORY | LOCATION OF CEMETERY OR CREMATORY | | |
| TYPE OF DISPOSTION | DATE OF DISPOSTION | | |

**REGISTRATION OF VITAL STATISTICS**

| REGISTRY *(Town and Country)* | DATE REGISTERED | FILE NUMBER | |
|---|---|---|---|
| | | STATE | OTHER |
| NAME OF FUNERAL DIRECTOR | ADDRESS | | |
| SIGNATURE OF AUTHORIZED INDIVIDUAL | | | |

***DD FORM 2064, APR 1977 (BACK)*** *USAPA V1.00*

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

# AUTOPSY EXAMINATION REPORT

Name: Al Alwani, Thair Hamid Khalaf Hassan
CCN: (b)(6)
Date of Birth (b)(6) 1979
Date of Death: (b)(6) 2007
Date/Time of Autopsy: 28 DEC 2007 1030 to 1400

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

Date of Report: 23 JAN 2008

**Circumstances of Death:** This 28-year-old civilian detainee was reportedly killed by small arms fire while being transported in a mine resistant ambush protected vehicle. During this transport, the civilian detainee reportedly grabbed an M4 rifle and fired one round below the groin area of a Marine. The Marine was not struck yet, retrieved his 9 mm pistol and shot the civilian detainee. At the time of his death, the civilian detainee was reportedly flex cuffed in the front and blindfolded.

**Authorization for Autopsy:** Armed Forces Medical Examiner, per 10 U.S. Code 1471

**Identification:** Presumptive identification is established by the examination of accompanying paper work.

**CAUSE OF DEATH: Multiple gunshot wounds**

**MANNER OF DEATH: Homicide**

## EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished male. The body weighs 167 pounds, is 67 ½ inches in length and appears compatible with the reported age of 28 years. The body is cold. Rigor is passing in all extremities. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure. Injuries of the head are described below. The head is normocephalic, and the scalp hair is black. Facial hair consists of a mustache and beard. The irides are brown. The corneae are cloudy. The conjunctivae are pale. The sclerae are white. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal skeleton and maxilla are palpably intact. The lips are without evident injury. The teeth are natural and in good condition. Examination of the neck reveals no evidence of injury. A 1/2 x 1/4 inch scar is on the right cheek. Injuries of the torso are described below. No evidence of injury of the ribs or the sternum is evident externally. The abdomen is flat. Healed surgical scars are not identified. The external genitalia are those of a normal adult circumcised male. The anus is unremarkable. The extremities show healed scar on both knees (right 1/2 inch and left 1 inch). The fingernails are intact. No tattoos are identified. Brown paper bags are secured over both hands with rubber bands.

## CLOTHING AND PERSONAL EFFECTS

The clothing and personal effects are photographically documented. [1]

WORN:

- Red and white headscarf (lying on the back of the head)
- Olive colored jacket (cut)
- Long green shirt that extends to the legs (cut)
- Black shirt (cut)
- White t-shirt (cut)
- Black t-shirt (cut)
- White tank top (cut)
- White boxers (cut)
- Gray pants (cut)
- Black socks
- Brown sandal (right foot)

ACCOMPANYING:

- White flex cuffs
- Brown sandal

[1] There are multiple defects identified on the headscarf, shirts and coat. Bullet wipe is seen associated with some of the defects on the headscarf. No definitive soot deposition or unburned gunpowder is seen.

## MEDICAL INTERVENTION

- None

## RADIOGRAPHS

A complete set of postmortem radiographs is obtained. Injuries seen radiographically are incorporated into the Evidence of Injury section below.

## EVIDENCE OF INJURY

The ordering of the following injuries is for descriptive purposes only, and is not intended to imply order of infliction or relative severity. All wound pathways are given relative to standard anatomic position.

PERFORATING GUNSHOT WOUND OF THE HEAD:

Entrance:

On the right side of the head, posterior to the right ear, is a 1/4 inch circular entrance gunshot wound. The edges of the wound contain multiple fine lacerations. There is an eccentric marginal abrasion that measures up to 1/8 inch on the anterior border at the two to four o'clock position. There is also a 1/2 inch poorly formed and faint abrasion extending from the two to four o'clock position of the anterior border. The wound is located 3-1/2 inches below the top of the head and 3-3/4 inches to the right of the posterior midline. No soot or gunpowder stippling is identified on the surrounding skin. (A section of this wound is submitted for histologic examination. Please see the Microscopic Examination section below.)

Injured:

The right temporoparietal scalp, right temporoparietal bones (1/2 inch defect with inward beveling), right occipital lobe of the cerebrum, cerebellum, occipital bone (1 x 1/2 inch defect with outward beveling), and occipital scalp on the left side of the head are injured.

Exit:

On the left side of the head, posterior to the left ear, is a 1/2 x 1/4 inch lacerated exit gunshot wound located 5 inches below the top of the head and 2 inches to the left of the posterior midline.

Recovered:

Two copper colored metal jacket fragments are recovered from the head scarf. One copper colored metal fragment and one gray colored metal fragment is recovered from the inner table of the left side of the occipital bone. One copper and gray colored metal fragment is recovered from the right temporal scalp.

Trajectory:

The bullet trajectory is right to left, slightly front to back and slightly downward.

Associated Injuries:

Associated is diffuse subarachnoid hemorrhage, subgaleal hemorrhage of the right and left side of the scalp, and linear fractures of the occipital, right temporal and right parietal bones.

PERFORATING GUNSHOT WOUND OF THE TORSO (RIGHT):

Entrance:

On the right side of the chest is a 1/4 inch circular entrance gunshot wound with a concentric 1/8 inch marginal abrasion. The wound margin appears dark and dried, and there is a slight red-purple discoloration of the skin immediately surrounding the wound. No definitive soot or gunpowder stippling is identified on the skin surrounding the wound. The wound is located 13-3/4 inches below the top of the head and 1/2 inch to the right of the anterior midline. (A section of the wound is submitted for histological examination. Please see the Microscopic Examination section below.)

Injured:

The skin, subcutaneous tissues, right second intercostal muscles, middle lobe of the right lung (1/4 inch lacerated wound), hilum of the right lung, lower lobe of the right lung (1 inch lacerated wound), posterior aspect of the ninth right rib, and skin of the right side of the back are injured.

Exit:

On the right side of the back (superior) is a 1/2 x 1/4 inch lacerated exit wound that has an eccentric marginal abrasion that measures up to 3/8 inch on the medial/inferior border in the four to ten o'clock position. The wound is located 17-1/2 inches below the top of the head and 2-3/4 inches to the right of the posterior midline.

Recovered:

No evidence is recovered at autopsy.

Trajectory:

The trajectory of the bullet is front to back and downward with slight left to right deviation.

Associated Injuries:

Associated with this wound is a right hemothorax (1250 ml).

PERFORATING GUNSHOT WOUND OF THE TORSO (LEFT):

Entrance:

On the left side of the chest is an oval 1/4 x 1/8 inch entrance gunshot wound with an eccentric marginal abrasion that measures up to 3/8 inch on the lateral border in the twelve to four o'clock position. The wound is located 14-1/2 inches below the top of the head and 1-1/2 inches to the left on the anterior midline. There is no soot or gunpowder stippling identified on the surrounding skin. (A section of the wound is submitted for histological examination. Please see the Microscopic Examination section below.)

Injured:

The skin, subcutaneous tissues, second left intercostal muscles, pericardium, heart (right ventricle - 1/2 inch lacerated wound, interventricular septum, tricuspid valve, and right atrium - 1/2 inch lacerated wound), right hemidiaphragm (1/2 inch lacerated wound), liver (5 inch pulpified wound of the anterior right lobe and 2 inch pulpified wound of the posterior right lobe), right hemidiaphragm (1/2 inch lacerated wound), ninth right intercostal muscle and skin of the right side of the back are injured.

Exit:

On the right side of the back (inferior) is a 1/4 inch exit wound with irregular margins and an eccentric marginal abrasion that measures 1/8 inch on the lateral/superior border (nine to six o'clock position), and 1/4 inch on the medial/inferior border (six to nine o'clock position). The wound is located 19-3/4 inches below the top of the head and 5-3/4 inches to the right of the posterior midline.

Recovered:

No evidence is recovered.

Trajectory:

The trajectory of the bullet is left to right, front to back and downwards.

Associated Injuries:

There is a hemopericardium (30 ml), a right hemothorax (1250 ml), and a hemoperitoneum (300 ml).

HEALED SUPERFICIAL PENETRATING BLAST FRAGMENTATION INJURY OF THE HEAD.

Entrance:

On the right cheek is a 1/2 x 1/4 inch well healed scar located 7 inches below the top of the head and 4-1/2 inches to the right of the anterior midline.

Injured:

The skin, subcutaneous tissues and muscle of the right side of the face are injured.

Recovered:

One irregular gray-metal fragment is recovered from a fibrous capsule adjacent to the right zygoma.

Trajectory:

The trajectory of the metal fragment is most likely right to left, back to front and upward.

Associated Injuries:

Associated with this wound is fibrosis and scarring seen on the right side of the face.

OTHER INJURIES:

There is a 1/2 x 1/4 inch abraded contusion on the right side of the forehead above the medial aspect of the right eyebrow. On the second finger of the left hand is a 1/4 inch linear abrasion.

## INTERNAL EXAMINATION

BODY CAVITIES:

The body is opened by the usual thoraco-abdominal incision and the chest plate is removed. The sternum and vertebral bodies are visibly and palpably intact. The right posterior ninth rib is fractured. No adhesions are present in any of the body cavities. One thousand two hundred and fifty milliliters of blood is identified in the right pleural cavity, 30 ml of blood is identified in the pericardium, and 300 ml of blood is identified in the peritoneum. All body organs are present in normal anatomical position. The subcutaneous fat layer of the abdominal wall is 1/2 inch thick.

HEAD AND CENTRAL NERVOUS SYSTEM:

Please see Evidence of Injury. Injuries of the scalp, skull and brain are described above. The scalp is reflected. The calvarium of the skull is removed. There is no epidural or subdural hemorrhage present. Where uninjured, the leptomeninges are thin and delicate. Blood tinged cerebrospinal fluid surrounds the injured brain which weighs 1270 grams. Where uninjured, the gyri and sulci are unremarkable. Coronal sections through the cerebral hemispheres reveal no non-traumatic lesions. Transverse sections through the brain stem are unremarkable. The atlanto-occipital joint is stable. The spinal cord is unremarkable.

NECK:

The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage by layer-wise dissection. The thyroid cartilage and hyoid bone are intact. The larynx is lined by intact white mucosa. The tongue is free of bite marks, hemorrhage, or other injuries. Incision and dissection of the posterior neck demonstrates no deep paracervical muscular injury and no cervical spine fractures.

CARDIOVASCULAR SYSTEM:

See Evidence of Injury. The injured heart weighs 310 grams. Where uninjured, the epicardial surface is smooth, and there is minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show wide patency. Where uninjured, the myocardium is homogenous, red-brown, and firm, and the valve leaflets are thin and mobile. The walls of the left ventricle, interventricular septum, and right ventricle are 1.0, 1.1, and 0.3-cm thick, respectively. Where uninjured, the endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

RESPIRATORY SYSTEM:

Please see Evidence of Injury. The upper airway is clear of debris and foreign material; the mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces are smooth, glistening and unremarkable bilaterally. Where uninjured, the pulmonary parenchyma is diffusely congested and edematous, exuding slight to moderate amounts of blood and frothy fluid; no focal non-traumatic lesions are noted. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The injured right lung weighs 300 grams. The left lung weighs 290 grams.

HEPATOBILIARY SYSTEM:

Please see Evidence of Injury. The 1480 gram liver has a smooth capsule covering dark red-brown, moderately congested parenchyma with no focal non traumatic lesions noted. The gallbladder contains 10 ml of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi.

GASTROINTESTINAL SYSTEM:

The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 20 ml of partially digested food. The small and large bowels are unremarkable. The pancreas has a normal pink-tan lobulated appearance and the ducts are clear. The appendix is present.

GENITOURINARY SYSTEM:

The right kidney weighs 90 grams; the left 90 grams. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, red-brown cortical surface. The cortex is sharply delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelves and ureters are unremarkable. White bladder mucosa overlies an intact bladder wall. The bladder contains approximately 50 ml of clear yellow urine. The testes, prostate gland and seminal vesicles are without note.

LYMPHORETICULAR SYSTEM:

The 170 gram spleen has a smooth, intact capsule covering red-purple, moderately firm parenchyma; the lymphoid follicles are unremarkable. Lymph nodes in the hilar, periaortic and iliac regions are not enlarged.

ENDOCRINE SYSTEM:

The pituitary gland is examined in situ and is unremarkable. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The right and left adrenal glands are symmetric, with bright yellow cortices and red-brown medullae. No masses or areas of hemorrhage are identified.

MUSCULOSKELETAL SYSTEM:

No non-traumatic abnormalities of muscle or bone are identified.

RECOVERED EVIDENCE:

- Left hand swab in swab box
- Right hand swab in swab box
- Brown paper bag, rubber band and fingernail clippings from left hand
- Brown paper bag, rubber band and fingernail clippings from right had
- Major case fingerprints
- One white cotton tank top
- One black t-shirt
- One white t-shirt
- Black long sleeved sweatshirt
- Tan striped calf-length blood soaked t-shirt
- Black/brown reversible corduroy jacket
- Brown leather sandals
- One gray pair of pants
- One pair of white boxer shorts
- One pair of black socks
- Metal bullet fragments from head (see Evidence of Injury section above)
- Metal bullet fragments from red/white scarf (see Evidence of Injury section above)
- Metal bullet fragments from right jaw (see Evidence of Injury section above)
- White cut flexi-cuff
- Red and white patterned scarf

## ADDITIONAL PROCEDURES

1. Documentary photographs are taken by (b)(6) OAFME staff photographer.
2. Personal effects and evidence are released to Special Agent (b)(6) NCIS - HQ - Washington DC.
3. Specimens retained for toxicology testing are: brain, heart, lung, liver, spleen, kidney, skeletal muscle, adipose tissue, blood, vitreous fluid, bile, urine and gastric contents.
4. The dissected organs are forwarded with body.
5. Special Agent (b)(6) attended the autopsy in its entirety.
6. (b)(6) OAFME staff autopsy assistant, assisted with the autopsy.

## MICROSCOPIC EXAMINATION

- Entrance gunshot wound (head) No definitive soot deposition is seen
- Entrance gunshot wound (right chest) No definitive soot deposition is seen
- Entrance gunshot wound (left chest) No definitive soot deposition is seen

**FINAL AUTOPSY DIAGNOSES:**

**I. Perforating gunshot wound of the head**
- **A. Entrance: On the right side of the head, posterior to the right ear, is a 1/4 inch circular entrance gunshot wound; there is an eccentric marginal abrasion; there is a poorly formed faint abrasion extending from the two to four o'clock position; no soot or gunpowder stippling is identified**
- **B. Injured: The scalp, right temporal/parietal bone, cerebrum, cerebellum, occipital bone and occipital scalp**
- **C. Exit: On the left side of the head, posterior to the left ear, is a 1/2 x 1/4 inch lacerated exit gunshot wound**
- **D. Recovered: Two copper colored metal jacket fragments from the head scarf; one copper colored metal fragment and one gray colored metal fragment from the inner table of the left side of the occipital bone and one copper and one gray colored metal fragment from the right temporal scalp**
- **E. Trajectory: Right to left, slightly front to back and slightly downward**
- **F. Associated injuries: Diffuse subarachnoid hemorrhage, subgaleal hemorrhage, and linear fractures of the occipital right temporal and right parietal bones**

**II. Perforating gunshot wound of the torso (right)**
- **A. Entrance: On the right side of the chest is a 1/4 inch circular entrance gunshot wound with a concentric 1/8 inch marginal abrasion; no definitive soot or gunpowder stippling is identified on the surrounding skin**
- **B. Injured: The skin, subcutaneous tissue, right second intercostal muscles, right lung, posterior aspect of the ninth right rib and skin of the right side of the back**
- **C. Exit: On the right side of the back (superior) is a 1/2 x 1/4 inch lacerated exit wound**
- **D. Recovered: Nothing**
- **E. Trajectory: The trajectory of the bullet is front to back and downward with slight left to right deviation**
- **F. Associated injuries: Associated with this wound is a right hemothorax (1250 ml)**

**III. Perforating gunshot wound of the torso (left)**
- **A. Entrance: On the left side of the chest is an oval 1/4 x 1/8 inch entrance gunshot wound with an eccentric marginal abrasion; there is no soot or gunpowder stippling identified on the surrounding skin**
- **B. Injured: The skin, subcutaneous tissue, second left intercostal muscles, pericardium, heart, right hemidiaphragm, liver, ninth right intercostal muscles and skin of the right side of the back**
- **C. Exit: On the right side of the back (inferior) is a 1/4 inch exit wound with lacerated margins**
- **D. Recovered: Nothing**
- **E. Trajectory: Left to right, front to back and downward**
- **F. Associated injuries: There is a hemopericardium (30 ml), a right hemothorax (1250 ml) and a hemoperitoneum (300 ml)**

**IV. Healed superficial penetrating blast fragment injury of the head**
- **A. Entrance: On the right cheek is 1/2 x 1/4 inch scar**
- **B. Injured: Skin, subcutaneous tissue and muscle**

C. **Recovered: One irregular gray metal fragment is recovered from a fibrous capsule adjacent to the right zygoma**
D. **Trajectory: Most likely right to left, back to front, and upward**
E. **Associated injuries: Fibrosis and scarring of the right side of the face**

V. **Other injuries:**
A. **Abraded contusion of the right side of the forehead**
B. **Linear abrasion of the second finger of the left hand**

VI. **Natural Disease: None identified within the limits of the examination**
VII. **Medical Therapy: None**
VIII. **Postmortem Changes: As described above**
IX. **Identifying Marks: As described above**
X. **Toxicology (AFIP):**
A. **VOLATILES: No ethanol is detected in the blood and vitreous fluid**
B. **DRUGS: No screened drugs of abuse or medications are detected in the urine**
C. **CARBON MONOXIDE: The carboxyhemoglobin saturation in the blood is less than 1%**
D. **CYANIDE: No cyanide is detected in the blood**

## OPINION

This 28-year-old civilian detainee (b)(6) died of multiple gunshot wounds. The detainee suffered a perforating gunshot wound of the head. The entrance was on the right side of the head posterior to the right ear, and there was no evidence of close range discharge of a firearm surrounding the wound. The scalp, skull and brain were injured. The exit wound was located on the left side of the head posterior to the left ear. Multiple bullet fragments were recovered from a headscarf which was situated behind the deceased head, the scalp, and the inner table of the occipital bone. The trajectory of this bullet was right to left, slightly front to back and slightly downward. Associated injuries included bleeding into the subarachnoid space of the brain, subgaleal hemorrhage, and fractures of the occipital, right temporal, and right parietal bones. A second gunshot wound was to the right side of the chest. The entrance was located on the right side of the chest and there was no evidence of close range discharge from a firearm on the skin surrounding the wound. The skin, subcutaneous tissues, right second intercostal muscles, right lung, the posterior aspect of the ninth right rib, and the skin of the right side of the back are injured. An exit was located on the right side of the back (superior). No evidence was recovered in association with this wound. The trajectory of the bullet was front to back and downward with slight left to right deviation. Associated with this wound was a right hemothorax. There was also a perforating gunshot wound of the left side of the chest. The entrance was located on the left side of the chest and there was no evidence of close range discharge of a firearm surrounding the wound. The skin, subcutaneous tissues, second left intercostal muscles, pericardium, heart, right hemidiaphragm, liver, and skin of the right side of the back were injured. There was an exit wound on the right side of the back. No evidence was recovered in association with this wound. The trajectory of the bullet was left to right and front to back and downward. Associated with this wound were a hemopericardium, a right hemothorax, and a hemoperitoneum. An additional injury discovered at autopsy was a healed superficial penetrating blast fragmentation injury of the head. The entrance was evidenced by a scar on the right cheek. The blast fragment injured the skin, subcutaneous tissues and muscle of the right side of the face. One irregular gray metal fragment

was recovered from a fibrous capsule adjacent to the right zygoma. The trajectory of the metal fragment was most likely right to left, back to front and upward. Injuries associated with this wound were fibrosis and scarring which was seen on the right side of the face. Additional minor injuries discovered at autopsy were an abraded contusion on the right side of the forehead and a linear abrasion on the second finger of the left hand. The toxicology screen is negative for cyanide, volatiles and screened medications and drugs of abuse. The carxyhemoglobin saturation in the blood was not elevated. The manner of death is homicide.

(b)(6)

(b)(6) MEDICAL EXAMINER

# CERTIFICATE OF DEATH (OVERSEAS)

Acte de décès (D'Outre-Mer)

| NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Sociale |
|---|---|---|---|
| AL Alwani, Thair Hamid, Khalaf Hassan | | Civilian | (b)(6) |

| ORGANIZATION Organisation | NATION (E.g. United States) Pays | DATE OF BIRTH Date de naissance | SEX Sexe |
|---|---|---|---|
| | | | [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS Etat Civil | | RELIGION Culte | |
|---|---|---|---|---|---|
| [X] | CAUCASOID Caucasienne | [ ] SINGLE Célibataire | [ ] DIVORCED Divorcé | [ ] PROTESTANT Protestant | [ ] OTHER (Specify) Autre (Spécifier) |
| [ ] | NEGROID Nègroïde | [ ] MARRIED Marié | [ ] SEPARATED Séparé | [ ] CATHOLIC Catholique | [X] |
| [ ] | OTHER (Specify) Autre (Spécifier) | [ ] WIDOWED Veuf | | [ ] 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 (Address 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 | | Multiple gunshot wounds | |
| ANTECEDENT CAUSES Symptômes précurseurs 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 causées par des causes extérieures |
|---|---|---|
| [ ] NATURAL Mort naturelle | [X] YES Oui [ ] NO Non | |
| [ ] ACCIDENT Mort accidentelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| [ ] SUICIDE Suicide | (b)(6) | |
| [X] HOMICIDE Homicide | (b)(6) | |

| DATE Date | AVIATION ACCIDENT Accident d'Aviation |
|---|---|
| 28 December 2007 | [ ] YES Oui [X] NO Non |

| DATE OF DEATH (Day, month, year) Date du décès (Jour, le mois, l'année) | PLACE OF DEATH Lieu du décès |
|---|---|
| (b)(6) 2007 | Iraq |

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 dit décédé et constate que le décès est survenu à l'heure indiquée et a, la suite des causes énumérées ci-dessus.

| NAME OF MEDICAL EXAMINER Nom du médecin examinateur | TITLE OR DEGREE Titre ou diplôme |
|---|---|
| (b)(6) | Medical Examiner |

| GRADE Grade | INSTALLATION OR ADDRESS Installation ou adresse |
|---|---|
| (b)(6) | Forward FB, Dover DE (b)(6) |
| DATE Date 12/28/2007 | |

DD FORM 2064 REPLACES SA FORM 2668, 1 JAN 72 AND SA FORM 2668-R(AE), 28 SEP 76, WHICH ARE OBSOLETE.

*(REMOVE, REVERSE AND RE-INSERT CARBONS BEFORE COMPLETING THIS SIDE)*

**DISPOSITON OF REMAINS**

| NAME OF MORTICIAN PREPARING REMAINS | GRADE | LICENSE NUMBER AND STATE | OTHER |
|---|---|---|---|
| | | | |

| INSTALLATION OR ADDRESS | DATE | SIGNATURE |
|---|---|---|
| (b)(6) | | |

| NAME OF CEMETERY OR CREMATORY | LOCATION OF CEMETERY OR CREMATORY |
|---|---|
| | |

| TYPE OF DISPOSITION | DATE OF DISPOSITION |
|---|---|
| | |

**REGISTRATION OF VITAL STATISTICS**

| REGISTRY (Town and Country) | DATE REGISTERED | FILE NUMBER | |
|---|---|---|---|
| | | STATE | OTHER |

| NAME OF FUNERAL DIRECTOR | ADDRESS |
|---|---|
| | |

| SIGNATURE OF AUTHORIZED INDIVIDUAL |
|---|
| |

*DD FORM 2064, APR 1977 (BACK)* *USAPA V1.00*

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

# AUTOPSY EXAMINATION REPORT

Name: DHAHI, Al Amiri Hassan Husayn
ISN (b)(6)
Date of Birth: Unknown
Date of Death: (b)(6) 2007
Date/Time of Autopsy: 28 DEC 2007 @0900 hrs
Date of Report: 11 MAR 2008

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

**Circumstances of Death:** This Operation Iraqi Freedom detainee, as reported, was vomiting blood and was transported to the surgical operating room for an emergency laparotomy. During the procedure, the decedent had uncontrollable gastric bleeding near the gastro-esophageal junction. The patient died, despite all attempts to control his acute blood loss.

**Authorization for Autopsy:** Armed Forces Medical Examiner, per U.S. Code 10, Section 1471

**Identification:** Presumptive identification per CID investigation.

**CAUSE OF DEATH:** **HEMORRHAGE DUE TO PEPTIC ULCER DISEASE**

**MANNER OF DEATH:** **NATURAL**

## EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished male. The body weighs 144 pounds and is 67 ½ inches in length. The body is cold. Rigor is present to an equal degree in all extremities. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure.

The head is normocephalic, and the scalp hair is black. Facial hair consists of mustache and extends into a full black/gray beard. The irides are hazel. The corneae are cloudy. The conjunctivae and sclerae are unremarkable. The external auditory canals and oral cavity are free of foreign material and abnormal secretions. The naris has dried blood present. The nasal skeleton and maxilla are palpably intact. The lips are without evident injury. The teeth are natural and in good condition. Examination of the neck reveals no evidence of injury.

The chest is unremarkable. No evidence of injury of the ribs or the sternum is evident externally. The abdomen is flat. The external genitalia are those of a normal adult circumcised male. The anus is unremarkable.

The fingernails are intact. There are two well healed scars on the dorsal surface of the right foot measuring up to 1 inch in maximum dimension. There is one well healed scar on the dorsal surface of the left foot measuring up to 1 inch in maximum dimension. There are no tattoos noted on the body. There is a skin tag measuring ¼ inch in maximum dimension on the left back. The majority of the posterior torso has multiple vitiligo patches.

## CLOTHING AND PERSONAL EFFECTS

None identified.

## MEDICAL INTERVENTION

A six inch vertical, surgical staple line is above the umbilicus. There is a puncture mark on the left antecubital fossa.

## RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates only a surgical staple line from T-11 to L3.

## EVIDENCE OF INJURY

None identified.

## INTERNAL EXAMINATION

BODY CAVITIES:

The ribs, sternum, and vertebral bodies are visibly and palpably intact. The peritoneal has 200 milliliters of bloody fluid. All body organs are present in normal anatomical position. The subcutaneous fat layer of the abdominal wall is ¾ inch thick.

HEAD AND NECK:

The galeal and subgaleal soft tissues of the scalp are free of injury. There are no skull fractures. The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage present. The leptomeninges are thin and delicate. The cerebral hemispheres are symmetrical. The structures at the base of the brain, including cranial nerves and blood vessels are intact.

The brain weighs 1270 grams, which has unremarkable gyri and sulci. Coronal sections through the cerebral hemispheres reveal no lesions. Transverse sections through the brain stem and cerebellum are unremarkable. The atlanto-occipital joint is stable.

The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage by layer-wise dissection. The thyroid cartilage and hyoid bone are intact. The larynx is lined by intact tan mucosa. The tongue is free of bite marks, hemorrhage, or other injuries.

CARDIOVASCULAR SYSTEM:

The heart weighs 320 grams and surrounded by an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show no significant atherosclerotic luminal stenosis present. The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left ventricle, interventricular septum, and right ventricle are 1.4, 1.4, and 0.3 centimeters thick, respectively. The endocardium is smooth and glistening.

The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

RESPIRATORY SYSTEM:

The upper airway is clear of debris and foreign material: the mucosal surfaces are smooth, yellow-tan and unremarkable. The right pleural surface has adhesions; but the left pleural surface has a smooth, glistening and unremarkable appearance. The pulmonary parenchyma is unremarkable, it exudes a slight amount of blood and frothy fluid; no focal lesions are noted.

The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 360 grams; the left 330 grams.

HEPATOBILIARY SYSTEM:

The liver weighs 1050 grams has an intact smooth capsule covering moderately congested tan-brown parenchyma with no focal lesions noted.

The gallbladder contains 1 milliliter of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi.

GASTROINTESTINAL SYSTEM:

The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and shows a 7 x 5 centimeter defect near the greater curvature. Located 1 centimeter from the gastric-esophageal junction are two gastric ulcers measuring 0.7 and 1.0 centimeters in maximum dimension. Both ulcers are surrounded by a 5.5 x 5 centimeter area of mucosal erythema. A black surgical suture is located between these two lesions.

The small and large bowels contain bloody semi-liquid and fecal matter, respectively. The pancreas is slightly decomposed with a tan lobulated appearance and the ducts are clear. The appendix is present.

GENITOURINARY SYSTEM:

The right kidney weighs 90 grams; the left kidney weighs 110 grams. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, red-brown cortical surface. The cortices are sharply delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelves and ureters are unremarkable.

Tan bladder mucosa overlies an intact bladder wall. The bladder contains no urine. The testes, prostate gland and seminal vesicles are unremarkable.

LYMPHORETICULAR SYSTEM:

The spleen weighs 870 grams has a smooth, intact capsule covering red-purple, moderately firm parenchyma; the lymphoid follicles are unremarkable.

Lymph nodes in the hilar, periaortic and iliac regions are not enlarged.

ENDOCRINE SYSTEM:

The pituitary gland is left *in situ* and is unremarkable. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The right and left adrenal glands are symmetric, with bright yellow cortices and red-brown medullae. No masses or areas of hemorrhage are identified.

MUSCULOSKELETAL SYSTEM:

No non-traumatic abnormalities of muscle or bone are identified.

## MICROSCOPIC EXAMINATION

Selected portions of organs are retained in formalin, with preparation of histology slides of the spleen pending.

## ADDITIONAL PROCEDURES

1. Documentary photographs are taken by OAFME.
2. Personal effects are released to the appropriate mortuary operations representatives.
3. Specimens retained for toxicology testing and/or DNA identification are: vitreous fluid, blood, bile, spleen, liver, lung, kidney, brain, myocardium, adipose tissue and skeletal muscle.
4. The dissected organs are forwarded with body.

## FINAL AUTOPSY DIAGNOSES

**I. Gastric Ulcers, Multiple, Near the Gastro-Esophageal Junction**

**II. Natural diseases or pre-existing conditions:**
A. Vitiligo of the posterior torso
B. Splenomegaly, 870 grams

**III. Evidence of Medical/Surgical Therapy:**
A. A 7 x 5 centimeter defect near the greater curvature of the stomach
B. Black suture present near the site of gastric bleeding
C. A vertical surgical staple line above the umbilicus
D. Puncture mark on the left antecubital fossa

**IV. Post-Mortem Changes:** Described above

**V. Identifying Body Marks:** None identified

**VI. Toxicology (AFIP)**
A. VOLATILES: No ethanol detected in the blood and vitreous fluid
B. DRUGS: Midazolam was detected in the blood
C. CYANIDE: There was no cyanide detected in the blood

## OPINION

The cause of death for this detainee (b)(6) is due to acute blood loss from two bleeding gastric ulcers. The 7 x 5 centimeter defect near the greater curvature of the stomach was produced by the surgeon to find the site of bleeding during the emergency laparotomy. The toxicology screen was positive for midazolam, an intravenous general anesthetic used on surgery patients. The puncture mark on the left antecubital fossa was the likely site of administration for this anesthetic during the decedent's emergency operation. Vitiligo is a benign condition that results in depigmentation of the skin. The manner of death is natural.

Histology slides of the spleen are pending. If there is significant information identified from these slides an addendum report will be generated.

(b)(6)

(b)(6) Medical Examiner

(b)(6)

(b)(6) Medical Examiner

# CERTIFICATE OF DEATH *(OVERSEAS)*
## Acte de décès (D'Outre-Mer)

| NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Social |
|---|---|---|---|
| BTB Dhahi, Al Amiri, Hassan Husayn | | Civilian | (b)(6) |

| ORGANIZATION Organisation | NATION (e.g. United States) Pays | DATE OF BIRTH Date de naissance | SEX Sexe |
|---|---|---|---|
| | | | [X] MALE<br>[ ] FEMALE |

| RACE Race | | MARITAL STATUS État Civil | | | RELIGION Culte | | |
|---|---|---|---|---|---|---|---|
| [X] | CAUCASOID Caucasique | [ ] | SINGLE Célibataire | [ ] DIVORCED Divorcé | [ ] PROTESTANT Protestant | [X] | OTHER (Specify) Autre (Spécifier) |
| [ ] | NEGROID Negroide | [ ] | MARRIED Marié | [ ] SEPARATED Séparé | [ ] CATHOLIC Catholique | | |
| [ ] | OTHER (Specify) Autre (Spécifier) | [ ] | WIDOWED Veuf | | [ ] JEWISH Juif | | |

| NAME OF NEXT OF KIN Nom du plus proche parent | RELATIONSHIP TO DECEASED Parenté du décédé avec le sus |
|---|---|
| STREET ADDRESS Domicilé 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 [1] Maladie ou condition directement responsable de la mort | Hemorrhage due to peptic ulcer disease | |
| ANTECEDENT CAUSES Symptômes précurseurs de la mort — MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| ANTECEDENT CAUSES Symptômes précurseurs de la mort — UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire | | |
| OTHER SIGNIFICANT CONDITIONS [2] Autres conditions significatives [2] | | |

| MODE OF DEATH Condition de décès | AUTOPSY PERFORMED Autopsie effectuée [X] YES Oui [ ] NO Non | CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort ausctées par des causes extérieures |
|---|---|---|
| [X] NATURAL Mort naturelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| [ ] ACCIDENT Mort accidentelle | | |
| [ ] SUICIDE Suicide | (b)(6) | |
| [ ] HOMICIDE Homicide | (b)(6) — DATE Date: 28 December 2007 | AVIATION ACCIDENT Accident d'Avion [ ] YES Oui [X] NO Non |

| DATE OF DEATH (day, month, year) Date de décès (le jour, le mois, l'année) | PLACE OF DEATH Lieu de décès |
|---|---|
| (b)(6) 2007 | Iraq |

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 dé funtat 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 médicin sanitaire | TITLE OR DEGREE Titre ou diplôme |
|---|---|
| (b)(6) | Medical Examiner |

| GRADE Grade | INSTALLATION OR ADDRESS Installation ou adresse |
|---|---|
| (b)(6) | Dover AFB, Dover DE |
| DATE Date: 3/13/2008 | SIGNATURE: (b)(6) |

[1] State disease, injury or complication which caused death, but not mode or dying such as heart failure, etc.
[2] State conditions contributing to the death, but not related to the disease or condition causing death.
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort, mais non la manière de mourir, telle qu'un arrêt du coeur, etc
[2] Préciser les conditions qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou à la condition qui a provoqué la mort.

DD FORM 1 APR 77 2064 REPLACES DA FORM 3868, 1 JAN 72 AND DA FORM 3968-R(PAS), 28 SEP 76, WHICH ARE OBSOLETE.

*(REMOVE, REVERSE AND RE-INSERT CARBONS BEFORE COMPLETING THIS SIDE)*

**DISPOSITON OF REMAINS**

| NAME OF MORTICIAN PREPARING REMAINS | GRADE | LICENSE NUMBER AND STATE | OTHER |
|---|---|---|---|
| INSTALLATION OR ADDRESS (b)(6) | DATE | SIGNATURE | |
| NAME OF CEMETERY OR CREMATORY | LOCATION OF CEMETERY OR CREMATORY | | |
| TYPE OF DISPOSITION | DATE OF DISPOSITION | | |

**REGISTRATION OF VITAL STATISTICS**

| REGISTRY *(Town and Country)* | DATE REGISTERED | FILE NUMBER | |
|---|---|---|---|
| | | STATE | OTHER |
| NAME OF FUNERAL DIRECTOR | ADDRESS | | |
| SIGNATURE OF AUTHORIZED INDIVIDUAL | | | |

***DD FORM 2064, APR 1977 (BACK)*** ***USAPA V1.00***

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

# AUTOPSY EXAMINATION REPORT

Name: (BTB) MOSHIN. Ra'ad Sa'ad
ISN/TMEP: (b)(6)
Date of Birth: (b)(6) JAN 1987
Date of Death: (b)(6) 2007

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Civilian Detainee
Place of Death: Baghdad, Iraq

Date/Time of Autopsy: 20 DEC 2007 @ 0930
Place of Autopsy: Port Mortuary, Dover AFB, DE

Date of Report: 01 JUL 2008

**Circumstances of Death:** This Civilian Detainee was admitted to the 31st CSH intensive care unit at Camp Cropper, Baghdad, Iraq on 12 DEC 2007 due to complications of end stage liver disease of an unknown etiology. He first came to the attention of the medical staff at Camp Cropper in October 2007 with complaints of nausea and fatigue, and was diagnosed with viral syndrome. His past medical history was significant only for a dermatitis for which he used topical medications and occasional oral prednisone. He developed progressive weight loss and jaundice with rising bilirubin, liver enzymes and ammonia levels in November 2007. He denied exposure to chemicals, medications, alcohol or herbal preparations. Viral markers for hepatitis A, B, C and HIV were negative. His condition progressively deteriorated to multi-organ system failure and he expired on (b)(6) 2007.

**Authorization for Autopsy:** Armed Forces Medical Examiner, per U.S. Code 10, Section 1471

**Identification:** Presumptive identification is made based upon identification bracelets on the body. Positive identification the ISN is confirmed by the comparison of an antemortem DNA reference and a postmortem DNA sample. Fingerprints are taken for comparison to an exemplar if one becomes available.

**CAUSE OF DEATH:** **LIVER FAILURE DUE TO CRYPTOGENIC HEPATITIS**

**MANNER OF DEATH:** **NATURAL**

## EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished Caucasoid male received unclad and wrapped in two sheets. The body weighs 183-pounds, is 66-inches in length and appears older than the reported age of 20-years. The body is cold. Rigor is passing to an equal degree in all extremities. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure. The body is jaundiced and anasarcic, with 4+ pitting edema over the entire torso and all extremities. The skin appears pale and dry with flaking, most notably on the scalp. Large bullae are present on the skin, mostly on the dependent portions of the body. Some skin slippage is present.

The head is normocephalic, and the scalp hair is sparse, short and brown. Facial hair consists of a sparse beard and moustache. The irides are brown, the corneae are cloudy, and the conjunctivae are edematous and otherwise unremarkable. The sclerae are icteric. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The earlobes are not pierced. The nasal skeleton and maxilla are palpably intact. The lips are without evident injury. The teeth are natural and in good condition. Examination of the neck reveals no evidence of injury.

The chest is unremarkable. No evidence of injury of the ribs or the sternum is evident externally. The abdomen is markedly protuberant with striae and an obvious fluid wave. The external genitalia are those of a normal adult circumcised male. The anus is without note. There is a partial thickness decubitis ulcer in the natal cleft on the left buttock that measures ½ x 3/8-inch. Healed surgical scars are not noted on the torso.

The extremities show the presence of a few healed scars on the shin and a few bruises, but no evidence of fractures, lacerations or deformities. The fingernails are trimmed and intact. A tattoo is noted (b)(6) An irregular scar is noted on the medial left ankle region that measures 1 ½ x ½-inch. There are numerous pustules associated with hair follicles on the extremities in various stages of healing.

## CLOTHING AND PERSONAL EFFECTS

No clothing or personal effects are received with the body.

## MEDICAL INTERVENTION

- Intravenous line inserted in the right subclavian region
- Urinary bladder catheter
- Nasogastric tube inserted into the left naris, properly located
- Medical dressing on decubitis ulcer, left buttock

## RADIOGRAPHS

A complete set of postmortem radiographs and CT images are obtained and demonstrates the following:

- Medical therapy
- Bilateral pleural effusions
- No old or recent fractures of the skull, axial skeleton or extremities
- No metallic foreign bodies

## EVIDENCE OF INJURY

There is no evidence of old or recent injury.

## INTERNAL EXAMINATION

BODY CAVITIES:
The body is opened by the usual thoraco-abdominal incision and the chest plate is removed. The ribs, sternum, and vertebral bodies are visibly and palpably intact. No adhesions are present in any of the body cavities. Both pleural cavities contain 300-milliliters of serosanguinous fluid. The pericardial sac contains 80-milliliters of serosanguinous fluid, and the abdominal cavity contains 3,400-milliliters of yellow serous fluid. All body organs are present in normal anatomical position.

The subcutaneous fat layer of the abdominal wall is 1-inch thick at the umbilicus.

HEAD AND CENTRAL NERVOUS SYSTEM:
The scalp is reflected. The galeal and subgaleal soft tissues of the scalp are free of injury. There are no skull fractures. The calvarium of the skull is removed. The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage present. The leptomeninges are thin and delicate. The cerebral hemispheres are symmetrical. The structures at the base of the brain, including cranial nerves and blood vessels are intact.

Clear cerebrospinal fluid surrounds the 1,590-gram brain, which has unremarkable gyri and sulci. Coronal sections through the cerebral hemispheres reveal no lesions. Transverse sections through the brain stem and cerebellum are unremarkable. The atlanto-occipital joint is stable.

NECK:
The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage by layer-wise dissection. The thyroid cartilage is soft and the hyoid bone is intact and unfused. The larynx is lined by intact white mucosa. The tongue is free of bite marks, hemorrhage, or other injuries.

CARDIOVASCULAR SYSTEM:
The 330-gram heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-

dominant pattern. Cross sections of the vessels show no luminal narrowing and are widely patent.

The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left ventricle, inter-ventricular septum, and right ventricle are 1.0, 0.3 and 1.0-centimeters thick, respectively. The endocardium is smooth and glistening.

The aorta gives rise to three intact and patent arch vessels; mild atherosclerosis (fatty streaks) is noted. The renal and mesenteric vessels are unremarkable.

RESPIRATORY SYSTEM:
The upper airway is clear of debris and foreign material: the mucosal surfaces are smooth, yellow-tan and unremarkable. The parietal pleural surfaces are smooth, glistening and unremarkable bilaterally.

The pulmonary parenchyma is diffusely congested and edematous, exuding moderate to large amounts of blood and frothy fluid; no focal lesions are noted. The visceral pleural surfaces are smooth, glistening and unremarkable bilaterally.

The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 800-grams; the left 790-grams.

HEPATOBILIARY SYSTEM:
The 2,340-gram liver has an intact smooth capsule covering very soft, yellow to tan parenchyma with no focal lesions noted. The expected liver weight for body weight is 2,315-grams.

The gallbladder contains 20-milliliters of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi.

GASTROINTESTINAL SYSTEM:
The esophagus is lined by gray-white, smooth mucosa; no varices are noted. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 60-milliliters of tan, semi-solid material.

The small and large bowels are unremarkable. The pancreas is soft and autolyzed and the ducts are clear. The appendix is present.

GENITOURINARY SYSTEM:
The right kidney weighs 120-grams; the left 110-grams. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, dusky red-brown cortical surface.

The cortex is sharply delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelves and ureters are unremarkable.

White bladder mucosa with focal hemorrhage overlies an intact bladder wall. The bladder contains approximately 10-milliliters of cloudy yellow urine. The testes, prostate gland and seminal vesicles are without note.

LYMPHORETICULAR SYSTEM:
The 210-gram spleen has a smooth, intact capsule covering red-purple, moderately firm congested parenchyma; the lymphoid follicles are unremarkable.

Lymph nodes in the hilar, periaortic and iliac regions are not enlarged.

ENDOCRINE SYSTEM:
The pituitary gland is left *in situ* and is grossly unremarkable. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The right and left adrenal glands are slightly autolyzed and symmetric, with bright yellow cortices and red-brown medullae. No masses or areas of hemorrhage are identified.

MUSCULOSKELETAL SYSTEM:
No non-traumatic abnormalities of muscle or bone are identified. Skin incisions with undermining subcutaneous dissection in areas of ecchymosis are negative for traumatic injury.

## SLIDE KEY AND MICROSCOPIC EXAMINATION

Selected portions of organs are retained in formalin, with preparation of histology slides.

1. Lung :} {Vascular congestion and desquamation of pnuemocytes into the alveolar
2. Lung :} {spaces. There is no evidence of acute infection.
3. Kidney: Autolysis.
4. Kidney: Autolysis.
5. Spleen: Congestion, otherwise unremarkable.
6. Liver: Severe macrosteatohepatitis, bridging fibrosis, bile stasis and biliary hyperplasia, with remarkably little inflammation.
7. Pancreas: Autolysis.
8. Heart (Left Ventricle): No pathologic diagnosis.
9. Heart: (Septum and Right Ventricle): No pathologic diagnosis.
10. Adrenal Glands: Autolysis.
11. Brain (Hippocampus): Hypoxic changes of the neurons in the CA-1 region.
12. Brain (Cerebellum): No pathologic diagnosis.
13. Brain (Pons): Hypoxic changes of the neurons in the periaqueductal gray matter.
14. Spinal Cord: No pathologic diagnosis.
15. Lymph Node: No pathologic diagnosis.
16. Thyroid Glands: No pathologic diagnosis.

## ADDITIONAL PROCEDURES

1. Documentary photographs are taken by AFMES staff photographer.
2. Personal effects are released to the appropriate mortuary operations representatives.
3. Specimens retained for toxicology testing and/or DNA identification are: vitreous fluid, blood, urine, bile, gastric contents, spleen, liver, lung, kidney, brain, myocardium, adipose tissue and skeletal muscle.
4. The dissected organs are forwarded with body.

5. Histological sections of the liver are submitted to the Department of Hepatic Pathology, AFIP for expert consultation. The results are described above (see "Slide Key and Microscopic Examination" (6. Liver).
6. Body fluids and tissue is submitted to the Department of Environmental and Infectious Disease Sciences, AFIP for heavy metal analysis. The results are described below (see "Toxicology").

## FINAL AUTOPSY DIAGNOSES

**I. Natural Disease**

A. Anasarca
B. Pulmonary edema and congestion, bilateral
C. Pleural effusions, bilateral
D. Pericardial effusion
E. Ascites
F. Hepatomegaly and severe macrosteatohepatitis with bridging fibrosis, bile stasis and biliary hyperplasia
G. Decubitis ulcer, left buttock
H. Icterus and jaundice

**II. There is no evidence of physical abuse.**

**III. Evidence of Medical Therapy**

A. Intravenous line inserted in the right subclavian region
B. Urinary bladder catheter
C. Nasogastric tube inserted into the left naris

**IV. Post-Mortem Changes**

A. Rigor is absent and equal in all extremities
B. Lividity is posterior and fixed except in areas exposed to pressure
C. The body temperature is cold to touch
D. Skin slippage

**V. Identifying Body Marks**

A. Tattoo (b)(6)
B. Scar on the medial left ankle region

**VI. Toxicology**

A. The blood is tested for carbon monoxide and the carboxyhemoglobin saturation is less than 1%.
B. The blood is tested for cyanide and none is detected.
C. The blood and vitreous fluid are tested for volatile compounds including ethanol and none are found.
D. The urine is screened for medications and drugs of abuse and the following medications are found:
   1. Lidocaine (an anti-arrhythmic medication) is present in the urine but not quantitated.

2. Morphine (a narcotic analgesic medication) is present in the urine and is quantitated in the blood at a level of 0.57 milligrams per liter.
3. Promethazine (an anti-emetic medication) is present in the urine and is quantitated in the blood at a level of 0.16 milligrams per liter.

E. The liver, kidney, urine, blood and bile are tested for heavy metals including aluminum (Al), antimony (Sb), arsenic (As), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), manganese (Mn), mercury (Hg), molybdenum (Mo), nickel (Ni), thallium (Tl), tin (Sn), titanium (Ti), uranium (U), vanadium (V), tungsten (W) and zinc (Zn) and the following are detected:
1. The liver and kidney did not contain elevated levels of any tested metals.
2. The blood contained elevated levels of cadmium (Cd), manganese (Mn) and tungsten (W). See the attached toxicology report for details.

## OPINION

This 20-year-old male civilian detainee, (believed to be) (b)(6) died of liver failure. The liver failure progressed to multi-organ system failure over a period of approximately 2 months. The cause of the liver failure is unknown; viral markers were negative (by review of the medical records) and by history the deceased denied chemical or drug exposure. Routine toxicological testing for ethanol and screened drugs of abuse was negative. Carbon monoxide and cyanide were not detected in the blood. The medications morphine and promethazine were present in the blood at therapeutic levels, consistent with hospitalization. Extended toxicological testing for heavy metal exposure was inconclusive. Although elevated levels of cadmium (Cd), manganese (Mn) and tungsten (W) were present in the blood, they were not present in the liver and kidney tissues tested and likely represent post-mortem re-distribution or artifact. The microscopic appearance of the liver tissue is a general pattern and an etiology of the liver failure cannot be determined with certainty. Based on the current investigation, laboratory studies and autopsy findings, the manner of death is best classified as natural.

(b)(6)

(b)(6) Medical Examiner

# CERTIFICATE OF DEATH *(OVERSEAS)*
## Acte de décès (D'Outre-Mer)

| NAME OF DECEASED (Last, First, Middle) Nom du décédé (Nom et prénoms) | GRADE Grade | BRANCH OF SERVICE Arme | SOCIAL SECURITY NUMBER Numéro de l'Assurance Sociale |
|---|---|---|---|
| BTB Mosin, Raad, Saad | | Civilian | (b)(6) |
| **ORGANIZATION** Organisation | **NATION** *(e.g. United States)* Pays: Iraq | **DATE OF BIRTH** Date de naissance | **SEX** Sexe: [X] MALE [ ] FEMALE |

| RACE Race | | MARITAL STATUS État Civil | | | RELIGION Culte | | |
|---|---|---|---|---|---|---|---|
| [X] | CAUCASOID Caucasique | [ ] | SINGLE Célibataire | [ ] DIVORCED Divorcé | [ ] | PROTESTANT Protestant | [ ] OTHER (Specify) Autre (Spécifier) |
| [ ] | NEGROID Negroïde | [ ] | MARRIED Marié | [ ] SEPARATED Séparé | [ ] | CATHOLIC Catholique | [X] |
| [ ] | OTHER (Specify) Autre (Spécifier) | [ ] | WIDOWED Veuf | | [ ] | 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 CONDITON DIRECTLY LEADING TO DEATH [1] Maladie ou condition directement responsable de la mort. | | Pending | |
| ANTECEDENT CAUSES Symptômes précurseurs 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 [2] Autres conditions significatives [2] | | | |

| MODE OF DEATH Condition de décès | | AUTOPSY PERFORMED Autopsie effectuée [X] YES Oui [ ] NO Non | CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures |
|---|---|---|---|
| [X] | NATURAL Mort naturelle | MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie | |
| [ ] | ACCIDENT Mort accidentelle | | |
| [ ] | SUICIDE Suicide | NAME OF PATHOLOGIST Nom du pathologiste (b)(6) | |
| [ ] | HOMICIDE Homicide | SIGNATURE (b)(6) DATE Date 20 December 2007 | AVIATION ACCIDENT Accident d'Avion [ ] YES Oui [X] NO Non |

| DATE OF DEATH (day, month, year) Date de décès (le jour, le mois, l'année) | PLACE OF DEATH Lieu de décès |
|---|---|
| (b)(6) 2007 (b)(6) | Camp Bucca Iraq |

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 dé funtet 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 médicin militaire ou du médicin sanitaire | TITLE OR DEGREE Titre ou diplôme |
|---|---|
| (b)(6) | Medical Examiner |

| GRADE Grade | INSTALLATION OR ADDRESS Installation ou adresse |
|---|---|
| (b)(6) | Dover AFB, Dover DE |
| DATE Date 12/20/2007 | SIGNATURE (b)(6) |

[1] State disease, injury or complication which caused death, but not
[2] State conditions contributing to the death, but not related to the d
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a provoqué la mort, telle qu'un arrêt du coeur, etc
[2] Préciser la condition qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou la condition qui a provoqué la mort

DD FORM 1 APR 77 2064 REPLACES DA FORM 3565, 1 JAN 72 AND DA FORM 3565-R(PAS), 29 SEP 75, WHICH ARE OBSOLETE.