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) HASHIM, Lo'y Lafta
ISN: (b)(6)
Date of Birth: (BTB) (b)(6) 1983
Date of Death: (b)(6) 2008

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

Date/Time of Autopsy: 22 DEC 2008 @ 0930
Place of Autopsy: Port Mortuary, Dover AFB, DE

Date of Report: 19 FEB 2008

Circumstances of Death: This (BTB) 24-year-old male Iraqi Civilian Detainee was noted by his fellow detainees to have difficulty breathing and then became unresponsive. CPR was initiated immediately, and was escalated to full ACLS protocol upon arrival to the CSH. Resuscitative efforts were to no avail.

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

Identification: Presumptive identification is established by an identification band on the left wrist. Positive identification is established by comparison of postmortem DNA examination and antemortem DNA records according to ISN.

CAUSE OF DEATH: **ATRIOVENTRICULAR NODAL ARTERY DYSPLASIA**

MANNER OF DEATH: **NATURAL**

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished Caucasoid male received unclad. The body weighs 184-pounds, is 69 ½-inches in length and appears compatible with the reported age of 24-years. The body is cold. Rigor is passing and present to an equal degree in all extremities. Violaceous lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure. Green discoloration of the skin of the lower right abdomen is noted. The body is unembalmed.

The head is normocephalic, and the scalp hair is dark and approximately 2-inches in length. Facial hair consists of dark beard stubble and a soul patch. The irides are brown, the pupils are round and equal in size, the corneae are cloudy, the conjunctivae are slightly injected, and the sclerae are white. 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 and oral mucous membranes are without evident injury. The teeth are natural and in good condition. Examination of the neck reveals no evidence of injury; the trachea is palpably in the midline of the neck.

The chest is symmetric with normally formed male breasts that are free of masses. No evidence of injury of the ribs or the sternum is evident externally. The abdomen is flat without recent trauma. Healed surgical scars are not noted on the torso. The external genitalia are those of a normal adult circumcised male. The posterior torso and anus are without note.

The extremities are symmetric and normally formed without evidence of significant recent trauma. The fingernails appear cyanotic and are trimmed and intact. The toenails are unremarkable. (b)(6) (b)(6) tattoos (b)(6) There is an identification bracelet around the left wrist.

CLOTHING AND PERSONAL EFFECTS

The following items accompany the body:

- White undershirt (cut)
- White underpants
- White pants
- Yellow jacket
- Yellow shorts
- White towel
- Two prayer rugs

MEDICAL INTERVENTION

- Endotracheal tube (properly located)
- Cardiac pacing pads on the anterior torso (properly located)
- Electrocardiogram electrodes on the anterior torso
- Intravenous lines inserted in both antecubital fossae

- Elastic medical bandages around both wrists
- Pulse-oximetry sensor on the right 2nd digit (forefinger)
- Urinary bladder catheter (properly located) with attached reservoir bag containing 50-millilters of clear yellow urine

RADIOGRAPHS

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

- Medical therapy as described above
- No metallic foreign bodies
- No fractures are noted

EVIDENCE OF INJURY

There is no evidence of recent significant 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. All body organs are present in normal anatomical position. There is clear, straw-colored serous fluid in both pleural cavities (right, 200-milliliters; left, 300-milliliters) as well as the peritoneal cavity (200-milliliters).

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, subdural or subarachnoid hemorrhage present. The leptomeninges are thin and delicate. The cerebral hemispheres are symmetrical with an unremarkable pattern of gyri and sulci. The blood vessels at the base of the brain are intact and symmetrical without significant atherosclerosis. The cranial nerves are likewise symmetrical and intact.

The brain weighs 1,440-grams and is fixed prior to further examination and submission for expert consultation.

Coronal sections through the cerebral hemispheres reveal no focal lesions in the cortex, white matter or deep nuclear structures. There is no midline shift. The ventricles of the brain are of normal size and contain clear cerebrospinal fluid. Transverse sections through the brain stem and cerebellum are unremarkable. See Addendum A for complete details.

The upper spinal cord as viewed through the foramen magnum is 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 and hyoid bone are intact. The larynx is lined by intact pink-white mucosa. The tongue is free of bite marks, hemorrhage, or other injuries.

CARDIOVASCULAR SYSTEM:
The 440-gram heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries arise normally and are present in a normal distribution, with a right-dominant pattern. Cross sections of the major coronary arteries demonstrate no luminal narrowing. Trabeculae are noted in the apex of the right ventricle. The heart is fixed prior to further examination and submission for expert consultation.

The foramen ovale is closed. The cardiac chamber dimensions are normal. The myocardium is homogenous and firm without focal softening, discoloration or fibrosis. The valve leaflets are thin and mobile. The walls of the left ventricle, inter-ventricular septum, and right ventricle are 1.4, 1.4, and 0.3-centimeters thick, respectively. The endocardium is smooth and glistening. See Addendum B for complete details.

The aorta has minimal atherosclerosis and 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, pink-tan and unremarkable. The parietal pleural surfaces are smooth, glistening and unremarkable bilaterally.

The right lung weighs 860-grams; the left 720-grams. The pulmonary parenchyma is diffusely congested and edematous, exuding slight to moderate 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.

HEPATOBILIARY SYSTEM:
The 2,220-gram liver has an intact smooth capsule covering congested tan-brown parenchyma with no focal lesions noted.

The gallbladder contains 7-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. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 40-milliliters of brown fluid.

The small and large bowels are unremarkable. The pancreas has a normal pink-tan lobulated appearance. The appendix is present.

GENITOURINARY SYSTEM:
The right kidney weighs 160-grams; the left 160-grams. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, red-brown cortical surfaces.

The cortices are 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 is empty of urine. The testes, prostate gland and seminal vesicles are without note.

LYMPHORETICULAR SYSTEM:
The thymus is small, fatty and otherwise unremarkable. The 340-gram spleen has a smooth, intact capsule covering congested, red-purple, moderately firm parenchyma; the lymphoid follicles are unremarkable.

Lymph nodes in the hilar, periaortic and iliac regions are not enlarged. Marked anthracosis is noted in the hilar lymph nodes.

ENDOCRINE SYSTEM:
The pituitary gland is examined *in situ* and is grossly unremarkable. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The parathyroid glands are not identified. 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:
Superficial posterior skin incisions are negative for traumatic injuries. No non-traumatic abnormalities of muscle or bone are identified.

MICROSCOPIC EXAMINATION AND SLIDE KEY

Selected portions of organs are retained in formalin, and selected histology slides are prepared.

1. Thyroid (X2):	No pathologic diagnosis.
2. Lymph Node (X2):	Benign calcification and anthracotic pigment.
3. Lung (X3):	Vascular congestion, focal pulmonary edema and anthracosis.
4. Lung (X2):	Vascular congestion, focal pulmonary edema and anthracosis.
5. Adrenal (X2):	Medullary autolysis, otherwise unremarkable.
6. Kidney (X2):	Autolysis of tubule cells, otherwise unremarkable.
7a. Spleen:	No pathologic diagnosis.
7b. Pancreas:	Autolysis.
8. Liver & Gall Bladder:	Vascular congestion and bile stasis of the liver. Autolysis of the gall bladder is noted.

TOXICOLOGY

VOLATILES: The blood and urine are examined for the presence of volatile compounds including ethanol at a cutoff of 20-milligrams per deciliter. No ethanol is detected.

DRUGS: The urine is screened for medications and drugs of abuse including 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 are detected:

Positive Lidocaine: Lidocaine was detected in the urine by gas chromatography and confirmed by gas chromatography/mass spectrometry.

Positive Antihistamine: Diphenhydramine was detected in the urine by gas chromatography and confirmed by gas chromatography/mass spectrometry. No diphenhydramine was detected in the blood at a limit of quantitation of 0.05-milligrams per liter using gas chromatography/mass spectrometry.

CARBON MONOXIDE: The carboxyhemoglobin saturation in the blood was less than 1% as determined by spectrophotometry with a limit of quantitation of 1%.

CYANIDE: There was no cyanide detected in the blood. The limit of quantitation for cyanide is 0.25-milligrams per liter.

ADDITIONAL PROCEDURES

1. Documentary photographs are taken by (b)(6)
2. Autopsy assistance is provided by (b)(6)
3. Personal effects are released to the appropriate mortuary operations representatives.
4. 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.
5. The brain and heart are fixed and retained for expert consultation (see Addendums A and B, respectively, below).
6. The dissected organs are forwarded with the unembalmed body.
7. No trace evidence and/or foreign material are collected by OAFME.

FINAL AUTOPSY DIAGNOSES

I. **Autopsy Findings**
   A. General
      1. Serous fluid in body cavities (200-milliliters right pleural, 300-milliliters left pleural, 200-milliliters peritoneal)
      2. Vascular congestion of liver, spleen and both lungs
      3. There is no evidence of physical abuse

B. Cardiovascular System
   1. Mild cardiomegaly (440-gram heart, 368-grams expected for body weight)
   2. No coronary arteriosclerosis noted grossly
   3. Trabeculae noted in right ventricular apex
   4. Focal dysplasia of the atrioventricular nodal artery

II. No other significant natural diseases or pre-existing conditions are identified, within the limitations of this examination.

III. Evidence of Medical Therapy
A. Endotracheal tube (properly located)
B. Cardiac pacing pads on the anterior torso (properly located)
C. Electrocardiogram electrodes on the anterior torso
D. Intravenous lines inserted in both antecubital fossae
E. Urinary bladder catheter

IV. Post-Mortem Changes
A. Rigor is passing and equal in all extremities
B. Lividity is posterior and fixed except in areas exposed to pressure
C. The body temperature is cold
D. There is green discoloration of the right lower abdomen

V. Identifying Body Marks (b)(6) **tattoos** (b)(6)

VI. There is no evidence of physical abuse.

VII. Toxicology
A. No ethanol is detected in the blood and urine.
B. No drugs of abuse are detected in the urine.
C. No cyanide is present in the blood.
D. Carboxyhemoglobin saturation in the blood is less than 1%.
E. The following medications are detected in the urine but not the blood:
   1. Lidocaine
   2. Diphenhydramine

OPINION

This (BTB) 24-year-old Iraqi civilian detainee (b)(6) died of a cardiac arrhythmia due to focal dysplasia of the atrioventricular nodal artery. This cardiac abnormality cannot be detected by screening tests or by physical examination, and has been implicated as the cause of sudden death. Other diagnoses considered as the cause of death are coronary vasospasm or ion channel disorder, neither of which can be proven microscopically. All other findings at autopsy were non-specific. Toxicological testing for ethanol, screened drugs of abuse, carbon monoxide and cyanide were negative. Lidocaine (a medication used in resuscitation efforts) and diphenhydramine (an over-the-counter antihistamine) were present in the urine only. The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

ADDENDUM A: Neuropathology Consultation Report

ARMED FORCES INSTITUTE OF PATHOLOGY
NEUROPATHOLOGY REPORT
CASE NUMBER: (b)(6)
PATIENT NAME
DATE OF EXAMINATION: 01/08/09

GROSS DESCRIPTION:

Brain weight: 1326 gm

The specimen consists of the brain of an adult.

The leptomeninges are thin, delicate and transparent. The frontal lobe poles have been removed for toxicology studies.

The brain is pale and moderately, diffusely swollen having widened gyri, compressed sulci and partially effaced perisellar, perimesencephalic and cerebellomedullary cisterns. The gyri have an otherwise anatomically normal configuration.

There is no sign of herniation or midline shift. Tentorial grooves are not visible on either uncus. The cerebellar tonsils have a slightly swollen configuration. The external aspects of the brainstem and cerebellum are not remarkable. The arteries at the base of the brain follow a normal distribution and are free of atherosclerosis. There are no aneurysmal dilatations or sites of occlusion. The identifiable cranial nerve roots are not remarkable.

Coronal sections of the cerebrum reveal no focal lesions in the cortex, white matter or deep nuclear structures. There is no midline shift. Sections of the midbrain, pons, medulla and cerebellum show no diffuse or focal abnormalities. The substantia nigra and locus coeruleus are well pigmented.

The ventricular system and aqueduct of Sylvius are patent with a normal size and configuration. The choroid plexus is unremarkable and the ependymal surfaces are smooth and glistening.

PHOTOGRAPHS: yes

MICROSCOPIC EXAMINATION:

Blocks of tissue for microscopic examination are removed from: (1) right lateral frontal lobe, (2) cingulate gyri/anterior corpus callosum, (3) mid right cingulate gyrus/corpus callosum/caudate nucleus/anterior limb of internal capsule, (4) left thalamus/subthalamic nucleus/substantia nigra/posterior limb of the internal capsule, (5) right thalamus/ red nucleus /posterior limb of the internal capsule, (6) right hippocampus, (7) right calcarine cortex/occipital horn of lateral ventricle, (8) right cerebellum, (9) midbrain, (10) pons and (11) medulla.

Sections from each block are stained with H&E, Bielschowsky and LFB techniques and immunostained for β–amyloid precursor protein (β-APP), glial fibrillary acidic protein (GFAP) and β–amyloid.

COMMENT:

The microscopic changes show mild, diffuse edema in the form of perivascular vacuolization of the neuropil and white matter which is consistent with the mild grossly described changes. There is also mild acute gliosis in the form of astrocytic swelling, especially around blood vessels. These changes are agonal and not specific.

DIAGNOSIS:
(b)(6)

NEUROPATHOLOGIST

ADDENDUM B: Cardiovascular Pathology Consultation Report

AFIP ACCESSION NO. SEQUENCE NO.
(b)(6)

January 21, 2009

(b)(6)
AFIP-(b)(6)
1413 Research Blvd.
Bldg. 102
Rockville, MD 20850

DIAGNOSIS: (b)(6) **autopsy:**
No definitive cardiac cause of death identified
Focal dysplasia, atrioventricular nodal artery

History: 24 year old Iraqi male; height 177 cm, weight 83 kg; civilian detainee; began having difficulty breathing and could not be resuscitated

Heart: 440 g (per contributor) (predicted normal value 324 g, upper limit 458 g for 176 cm male); 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 ventricular from acute angle to septum 30 mm, posterior right ventricle wall thickness 4 mm; valves grossly unremarkable; normal endocardium; no gross myocardial scarring or fibrosis; histologic sections demonstrate no inflammation, scarring, or necrosis

Conduction system: The sinoatrial node and nodal artery are unremarkable. The compact atrioventricular (AV) node and penetrating bundle demonstrate focal fragmentation without inflammation, increased fat, or proteoglycans. The proximal left bundle branch is unremarkable and the right is not seen. There are no discernible bypass tracts between the AV node and the ventricular septum. There is mild AV nodal artery dysplasia with medial and intimal thickening and focal moderate dysplasia of an AV nodal artery branch with medial thickening.

Coronary arteries: Normal ostia; right dominance; no gross atherosclerosis

Comment: Small vessel disease (AV nodal artery dysplasia) as seen in this case has been implicated in sudden death, although causality in an individual case can be difficult to ascertain. We cannot exclude coronary spasm as a cause of death, which has no histologic imprint, or an idiopathic arrhythmia related to ion channel disorder.

(b)(6)
Department of Cardiovascular Pathology

(b)(6)

USE INK OR BALL-POINT PEN ONLY

Office Armed Forces Med Examiner

(b)(6)

(b)(6)

12/29/2008

(b)(6)

CONSULTATIONS

THIS IS A PERMANENT PART OF THE RECORD AND IS NOT TO BE REMOVED FROM THE FOLDER

PLEASE CIRCULATE AMONG THE FOLLOWING OFFICERS --------> AND THEN RETURN TO THE REVIEWING OFFICER ----▽

Neuropathology

(b)(6)

MEMO FROM REVIEWING OFFICER:

24 yo male Iraqi detainee noted to be gasping for air with seizure-like activity. See PSD for complete details. Thank you.

(b)(6)

(b)(6)

29 DEC 2008
(DATE)

(REVIEWING OFFICER)

CAFHE

ARMED FORCES INSTITUTE OF PATHOLOGY
NEUROPATHOLOGY REPORT
CASE NUMBER: (b)(6)
PATIENT NAME: HASHIM, LO'YL
DATE OF EXAMINATION: 01/08/09

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DIAGNOSIS:

(b)(6)

NEUROPATHOLOGIST

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

23 JAN 2006

AFIP Interdepartmental Consultation Report

AFIP ACCESSION NO. SEQUENCE NO.
(b)(6)
HASHIM, LO'Y L. (b)(6)
(b)(6)

(b)(6)

AFIP (b)(6)
1413 Research Blvd.
Bldg. 102
Rockville, MD 20850

DIAGNOSIS: (b)(6) **Heart, autopsy:**
No definitive cardiac cause of death identified
Focal dysplasia, atrioventricular nodal artery

History: 24 year old Iraqi male: height 177 cm, weight 83 kg; civilian detainee; began having difficulty breathing and could not be resuscitated

Heart: 440 g (per contributor) (predicted normal value 324 g, upper limit 458 g for 176 cm male); 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 ventricular from acute angle to septum 30 mm, posterior right ventricle wall thickness 4 mm; valves grossly unremarkable; normal endocardium; no gross myocardial scarring or fibrosis; histologic sections demonstrate no inflammation, scarring, or necrosis

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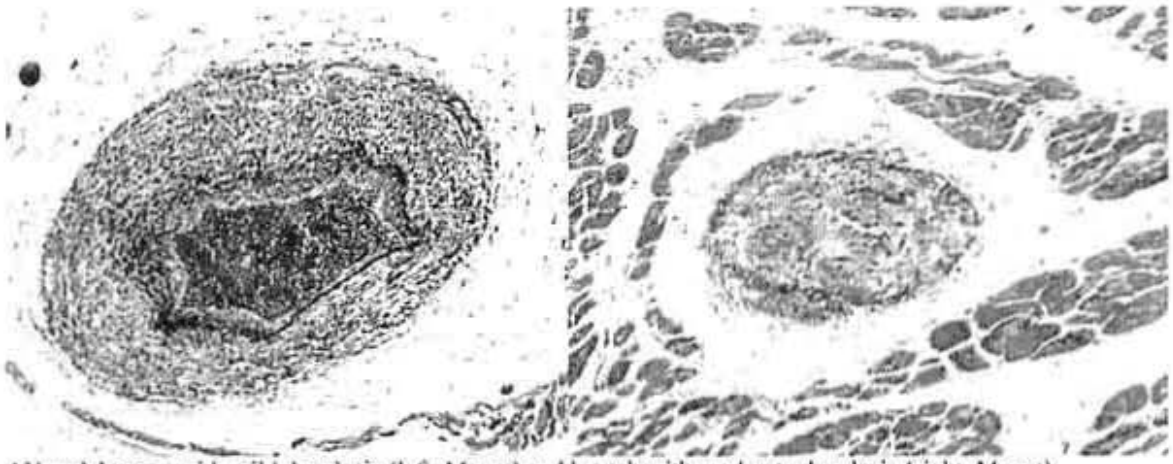
Comment: Small vessel disease (AV nodal artery dysplasia) as seen in this case has been implicated in sudden death, although causality in an individual case can be difficult to ascertain. We cannot exclude coronary spasm as a cause of death, which has no histologic imprint, or an idiopathic arrhythmia related to ion channel disorder.

Department of Cardiovascular Pathology
6825 16th St., N.W., Bldg. 54, Room 2088, Washington, DC 20306-6000
(b)(6)

MEDCOM 1011

AFIP ACCESSION NO. SEQUENCE NO.
(b)(6)

HASHIM, LO'Y L (b)(6)
(b)(6)



AV nodal artery with mild dysplasia (left, Movat) and branch with moderate dysplasia (right, Movat)

A copy of this report has been faxed to you a(b)(6)

Blocks made: 12 (5 myocardium, 7 conduction system)
Slides made: 12 (12 H&E, 3 Movat)

(b)(6)

Department of Cardiovascular Pathology

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 Hashim, Lo'y, Lafta		Civilian	(b)(6)

ORGANIZATION Organisation	NATION (e.g. United States) Pays	DATE OF BIRTH Date de naissance	SEX Sexe
	Unknown		[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) UNK
[ ]	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	Atrioventricular Nodal Artery Dysplasia	Unknown
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	SIGN (b)(6)	DATE Date 22 December 2008 — AVIATION ACCIDENT Accident à Avion [ ] YES Oui [X] NO Non

DATE OF DEATH (day, month, year) Date du décès (le jour, le mois, l'année)	PLACE OF DEATH Lieu de décès
(b)(6) 2008 0602	Camp Cropper 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 funtel 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 3/4/2009	SIGNATURE (b)(6)

[1] State disease, injury or complication which caused death, but not mode d
[2] State conditions contributing to the death, but not related to the disease c
[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 3665, 1 JAN 72 AND DA FORM 3665-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 EXAMINATION REPORT

Name: BTB ABD. Fu'ad Ali
ISN (b)(6)
Date of Birth (b)(6) 1955
Date of Death (b)(6) 08
Date/Time of Autopsy: 31 MAY 08 @1230 hrs
Date of Report: 27 AUG 2008

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

Circumstances of Death: This 52-year-old Iraqi detainee who suffered a cerebral vascular accident one month after being diagnosed with a myocardial infarction. He was transferred to the ICU and was deemed non-operable by the neurosurgery team. He was placed on do not resuscitate (DNR) orders after an ethic committee meeting decision. He was pronounced dead shortly thereafter.

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

Identification: Identified by transportation documents. Postmortem fingerprint and dental x-rays were obtained prior to the autopsy.

CAUSE OF DEATH: **SPONTANEOUS INTRACRANIAL HEMORRHAGE DUE TO ATHROSCLEROTIC CARDIOVASCULAR DISEASE**

MANNER OF DEATH: **NATURAL**

EXTERNAL EXAMINATION

The body is that of a well-developed nude male. The body weighs 142 pounds, is 67 inches in length and appears compatible with the reported age of 52 years. 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/gray. Facial hair consists of a mustache and a shaven beard. The irides are brown. The corneae are cloudy. The conjunctivae and sclerae are unremarkable. 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 poor 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 unremarkable. There is a 2 ½ x 2 ¼ inch well healed surgical scar on the anterior left upper thigh. The external genitalia are those of a circumcised adult. The posterior torso and anus are unremarkable.

There is a 2 x 1 inch contusion of the dorsal surface of the right hand. There is a 1 x ½ inch contusion of the right groin. There are two contusions of the anterior left upper thigh measuring up ¼ inch in maximum dimension. There is a 2 x ¼ inch contusion with an underlying 7 x 4 centimeter area of hemorrhage. There is a 3 x ¼ inch contusion on the anterior medial right ankle.[1] The extremities show no evidence of fractures or lacerations. The fingernails are intact. Tattoos (b)(6)

CLOTHING AND PERSONAL EFFECTS

None identified.

MEDICAL INTERVENTION

- Six needle puncture marks on the right ante-cubital fossa
- Two needle puncture marks on the left ante-cubital fossa
- One needle puncture mark surrounded by a 1 x ½ inch contusion on the left femoral artery/vein region
- Two band-aids on the left palm and left anterior upper thigh

RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrate intra-parenchymal brain hemorrhage and multiple remote ballistic fragments in the left upper thigh which are listed under "Internal Examination."

[1] Contusions are likely a result of emergency medical intervention

EVIDENCE OF INJURY

None.

INTERNAL EXAMINATION

BODY CAVITIES:

The ribs, sternum, and vertebral bodies are visibly and palpably intact. No adhesions or abnormal collections of fluid are present in any of the body cavities. All body organs are present in normal anatomical position. The subcutaneous fat layer of the abdominal wall is 1 inch thick.

HEAD (CENTRAL NERVOUS SYSTEM) AND NECK:

The brain weighs 1370 grams and appears edematous. 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.

At the base of the anterior right temporal lobe is a 7 x 4.5 centimeter defect revealing an 8 x 5 x 3.5 centimeter intracranial clot with extension of hemorrhage into the ventricular system (right lateral ventricle, third, and fourth ventricles). Subarachnoid hemorrhage surrounds this temporal lobe defect extending to the right occipital lobe and the base of the bilateral frontal lobes and cerebellar hemispheres. The arteries of the circle of Willis are in the usual anatomic configuration and are patent. No aneursyms are identified. The cerebellum is serially sectioned along the sagittal plane, revealing an unremarkable cut surface. The brainstem is bisected sagittally to reveal duret hemorrhages. There is a 2.5 x 0.8 x. 0.4 centimeter right temporal lobe laceration along the edge of the right tentorium cerebelli. Coronal sectioning of the cerebral hemispheres reveal a separate focus of intercranial hemorrhage at the gray-white junction in the right parietal lobe measuring 1.0 x 0.8 x 0.5 centimeters. 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 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:

The heart weighs 380 grams and 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 severe (greater than 75%) atherosclerotic luminal stenosis of the left anterior descending artery and right coronary artery measuring 5.0 and 6.0 centimeters from the left and right coronary orifice, respectively.

Much of the anterior left ventricular wall is asymmetrically thin (0.5 centimeter on average) with tan/gray discoloration compared to the posterior left ventricular wall (1.0 centimeter on average) with normal appearing homogenous, red-brown myocardial tissue. The valve leaflets are thin and mobile. The walls of the left ventricle, interventricular septum, and right ventricle are 0.5, 1.2, and 0.2 centimeters thick, respectively. The endocardial surface is dull and slightly roughened. The aorta display atherosclerotic changes and 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 pleural surfaces are smooth, glistening and unremarkable bilaterally.

The pulmonary parenchyma is diffusely congested and edematous exudes blood and frothy fluid with no focal lesions noted. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 1100 grams and the left lung weighs 850 grams.

HEPATOBILIARY SYSTEM:

The liver weighs 1510 grams has an intact smooth capsule covering moderately congested tan-brown parenchyma with no focal lesions noted. The gallbladder contains 40 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. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 350 milliliters of tan fluid. 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 100 grams; the left weighs 90 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.

The 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 100 grams and 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. Multiple remote metallic fragments in the left thigh are identified.

MICROSCOPIC EXAMINATION

Selected portions of organs are retained in formalin with preparation of histology slides listed below:

Adrenal glands (slide 1): No pathological diagnosis

Prostate (slide 2): No pathological diagnosis

Liver, spleen, left kidney (slide 3): No pathological diagnosis

Right kidney and left lung (slide 4): No pathological diagnosis

Right lung (slide 5): Two out the three lobes of the right lung display sheets of acute inflammatory cells admixed with macrophages and red blood cells consistent with acute pneumonia.

Left anterior descending artery (slides 6) and right coronary artery (slide 7): Sections of the coronary arteries display intimal hyperplasia and atherosclerotic plaques composed of fibrin and cholesterol plaques.

Left ventricle of the heart (slide 8): Section of the heart display vast area of fibrotic stroma with congested blood vessels consistent with a remote myocardial infarction.

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, gastric contents, spleen, liver, lung, kidney, adipose tissue and skeletal muscle.
4. The dissected organs are forwarded with body.

FINAL AUTOPSY DIAGNOSIS

I. **Spontaneous Intracranial Hemorrhage:**
   i. 7 x 4.5 centimeter defect at the base of the anterior right temporal lobe reveals an 8 x 5 x 3.5 centimeter intracranial clot with extension of hemorrhage into the ventricular system (right lateral ventricle, third, and fourth ventricles)
   ii. Subarachnoid hemorrhage of the right temporal, right occipital, bilateral frontal lobes and both cerebellar hemispheres.
   iii. Duret hemorrhages of the brainstem
   iv. 2.5 x 0.8 x. 0.4 centimeter right temporal lobe laceration along the edge of the right tentorium cerebelli.
   v. Separated 1.0 x 0.8 x 0.5 centimeter intercranial hemorrhage at the right parietal lobe gray-white junction

II. **Atherosclerotic Cardiovascular Disease**
   i. Severe (greater than 75% occlusion) atherosclerotic luminal stenosis of the left anterior descending and right coronary arteries.
   ii. Extensive old myocardioal infarction, anterior wall of left ventricle.

III. **Acute Pneumonia**

IV. **Pre-existing Condition:** Remote ballistic injury to the left upper thigh

V. **Evidence of Medical Therapy:** As described above

VI. **Post-Mortem Changes:** As described above

VII. **Identifying Body Marks:** As described above

VIII. **Toxicology (AFIP)**
   i. CARBON MONOXIDE: Carboxyhemoglobin saturation in the blood
   ii. VOLATILES: No ethanol was detected in the blood and vitreous fluid
   iii. CYANIDE: No cyanide detected in the blood
   iv. SCREENED MEDICATIONS: Lidocaine was detected in the blood
   v. SCREENED DRUGS OF ABUSE: No drugs detected in the blood

OPINION

This 52-year-old male detainee (b)(6) died from a spontaneous intracranial hemorrhage (stroke / cerebral vascular accident) complicated by an old myocardial infarction (heart attack). Toxicology screen revealed presence of Lidocaine, a resuscitative medication. No significant sign of trauma on the body was noted at autopsy. 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 Abd, Fu ad, Ali		Civilian	(b)(6)

ORGANIZATION Organisation	NATION *(e.g. United States)* Pays	DATE OF BIRTH Date de naissance	SEX Sexe
		(b)(6) 1955	[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) Islam
[ ]	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.	Spontaneous intracranial hemorrhage due to atherosclerotic cardiovascular 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	
	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 Signature	DATE Date 31 May 2008
		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) 2008	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 diplômé
(b)(6)	Medical Examiner

GRADE Grade	INSTALLATION OR ADDRESS Installation ou adresse
(b)(6)	Dover AFB, Dover DE
DATE Date 8/27/2008	SIGNATURE Signature

[1] State disease, injury or complication which caused death, but not mode of dying such as heart failure, ect.
[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 concribué 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 3668, 1 JAN 72 AND DA FORM 3665-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
(FAX 1-301-319-0635)

FINAL AUTOPSY REPORT

Name: QURUNFIR Al-Araki, Husayn Kazim
ISN (b)(6)
Date of Birth: Unknown
Date of Death (b)(6) 2008
Date of Autopsy: 25 MAY 2008, 1130 hours
Date of Report: 06 JUN 2008

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

Circumstances of Death:
Preliminary investigation revealed that (b)(6) an Iraqi detainee, was admitted to the Detainee Medical Center, Camp Remembrance II, Theater Internment Facility, Camp cropper, IZ, on (b)(6) 2008, with apparent injuries and was pronounced dead by the treating physician.

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

Identification:
Detainee (b)(6) is identified by transportation documents and the accompanied CID Investigation Report. Fingerprints, dental radiographs and a sample for DNA identification are obtained on 25 MAY 2008.

CAUSE OF DEATH:
Blunt Force Injuries and Neck Compression

MANNER OF DEATH:
Homicide

EXTERNAL EXAMINATION

The body is that of an unclad well-developed, well-nourished Caucasian male, on a gray-black blanket in a plastic body pouch. Extensive bruising of the neck, torso and extremities are noted; see "Evidence of Injury". The body weighs 124 pounds and is approximately 63" in length. The age of the decedent can not be definitely determined but appears to be of a middle aged man.

The scalp hair is black and short. A black mustache and beard are noted. The eyelids are unremarkable with no apparent trauma. The eye globes are unremarkable with no apparent trauma. The irides are pale and grayish. The corneae are whitish and slightly cloudy. The sclerae are white with a small area of hemorrhage on the right side. The external auditory canals, external nares and oral cavity are free of foreign material. The oral cavity reveal presence of mucosal trauma on both sides: see "Evidence of Injury". The nasal skeleton is palpably intact. The tongue reveals a contusion on the left margin with no associated bite marks. The lips are unremarkable with no apparent injury. The teeth are natural and are unremarkable.

The neck reveals presence of contusions anteriorly and on both sides; see "Evidence of Injury". No ligature marks are present. .

The anterior torso reveals extensive bruising of the chest and abdomen. Contusions are dusky red, and more pronounced on the abdomen. The posterior torso also reveals contusions, more pronounced on the flanks. No penetrating wounds or sharp force injuries are noted. No contusions or trauma is noted of the suprapubic area and the external genitalia. The external genitalia are those of an adult circumcised male and are grossly unremarkable.

The upper extremities reveal contusions of the left arm and right elbow region. The lower extremities reveal presence of contusions on the upper thighs, legs and feet; see "Evidence of Injury".

No tattoos, major surgical or characteristic scars or other identifying marks are noted.

EVIDENCE OF INJURY

Multiple injuries are noted of the neck, torso and extremities and are described below. No evidence of sharp force or penetrating injuries is noted.

A. Injuries of the Head:

Examination of the head reveals no gross evidence of trauma. Examination of the oral cavity reveals bilateral mucosal contusions corresponding to the lateral teeth on both sides; see "Opinion".

Reflection of the scalp reveals no subgaleal hemorrhage or evidence of skull fractures. The cranial cavity is unremarkable with no evidence of trauma or intracranial hemorrhage.

B. Injuries of the Neck:
Examination of the neck reveals presence of un-patterned contusions on the anterior and lateral surfaces of the neck. Reflection of the skin reveals bilateral hemorrhages of the strap muscles, more pronounced on the left side. The hyoid is intact, but an area of hemorrhage is noted on its left side. The thyroid cartilage is intact. Localised hemorrhage is noted on the right side of the upper part of the esophagus with no evidence of laceration or perforation.

Posterior dissection of the neck reveals localized hemorrhage of the posterior right neck muscles; see "Opinion". No gross evidence of cervical spinal fractures or abnormal mobility is noted.

C. Injuries of the Torso:
External examination of the torso reveals extensive contusions on the anterior chest and abdomen, connecting the neck contusions superiorly and sparing only the supra-pubic area inferiorly. Reflection of the anterior chest and abdominal wall reveals hemorrhage of the sternum and anterior chest cage. No rib fractures are seen. Examination of the back reveals extensive subcutaneous and intramuscular hemorrhage of the back muscles, more pronounced in both flanks. No spinal fractures are noted.

Removal of the chest plate reveals hemorrhage of its posterior surface, anterior mediastinum and anterior pericardium. No gross trauma to the heart or lungs is noted. Removal of the chest organs reveals bilateral hemorrhage of the posterior-lateral inter-costal muscles, with no gross evidence of associated rib fractures.

Examination of the abdomen reveals multiple focal hemorrhagic areas of the small intestine and a single contusion of the transverse colon, midline. Hemorrhage is noted in the adipose and soft tissue surrounding the head of the pancreas with no free blood or gross pancreatic laceration. Source of hemorrhage is not identified. Bilateral severe perirenal-subcapsular hemorrhages are noted of both kidneys, more pronounced on the right side. Peri-adrenal hemorrhages are also noted, more pronounced on the right side. Severe bilateral retroperitoneal hemorrhage is noted. Hemorrhage is also noted around the prostate gland and on the anterior wall of the urinary bladder. The bladder wall is intact but empty of urine.

D. Injuries of the Extremities:
Examination of the upper extremities reveals marked subcutaneous and intramuscular hemorrhage of the muscles of the posterior and lateral right arm. No significant injury is noted of the right forearm or the left upper extremity.

Examination of the lower extremities reveals no significant injuries. Multiple contusions are noted on the anterior thigh and anterior-medial legs. Sections through these contusions reveal subcutaneous and intramuscular hemorrhage, though less prominent than those of the upper extremities.

Examination of both feet reveals contusions of the anterior plantar surfaces of both feet and the dorsum of both big toes. Sections through these contusions reveal subcutaneous and prominent intramuscular hemorrhages.

INTERNAL EXAMINATION

The injuries are listed above and will not be repeated.

BODY CAVITIES:

See "Evidence of Injury". The body is opened by the usual thoraco-abdominal incision and the chest plate is removed. Bilateral adhesions are noted in the chest cavitiy, more prominent on the left side. No abnormal collections of fluid are present noted. All body organs are present in their normal anatomical position.

HEAD: (CENTRAL NERVOUS SYSTEM)

The scalp is reflected. No evidence of trauma is noted. 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 parenchyma is grossly unremarkable with no significant abnormality. The brain weighs 1330 grams.

NECK:
See "Evidence of Injury"

Examination and dissection of the soft tissues of the neck, layer-by-layer, reveals no non-traumatic abnormalities. The thyroid cartilage and hyoid bone are intact.

CARDIOVASCULAR SYSTEM:
See "Evidence of Injury".

The pericardium is intact. The pericardial sac is free of fluid and adhesions. The coronary arteries arise normally, follow the usual distribution and are patent, without evidence of atherosclerosis or thrombosis. The chambers and valves exhibit the usual

size-position relationship and are unremarkable. The myocardium is unremarkable. The atrial and ventricular septa are intact. The aorta and its major branches arise normally, follow the usual course and are unremarkable without significant atherosclerosis and other abnormality. The venae cavae and their major tributaries return to the heart in the usual distribution and are free of thrombi. The heart weighs 300 grams.

RESPIRATORY SYSTEM:
The upper airway is clear of debris and foreign material; the mucosal surfaces are unremarkable. The pleural surfaces are unremarkable bilaterally. The pulmonary parenchyma is grey-red and are markedly congested. No consolidation or significant abnormality is grossly noted. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right and left lung weighs 610 grams and 540 grams, respectively.

LIVER & BILIARY SYSTEM:
The hepatic capsule is smooth and intact, covering dark brown parenchyma with no apparent focal lesions. The gallbladder is intact and contains dark green bile and no gall stones. The extrahepatic biliary tree is without evidence of calculi. The liver weighs 1090 grams.

ALIMENTARY TRACT:
See "Evidence of Injury".

The tongue reveals no non-traumatic abnormalities. The esophagus is lined by gray-white mucosa. The gastric mucosa reveals the normal rugal folds. The stomach is distended with undigested-partially digested food; sample is submitted for toxicology. The small and large bowel is unremarkable with no non-traumatic abnormalities. The pancreas is grossly unremarkable with no non-traumatic lesions. The appendix is present and unremarkable.

GENITOURINARY SYSTEM:
See "Evidence of Injury".

The renal capsules are smooth and thin. The cortices are delineated from the medullary pyramids, and unremarkable. The calyces, pelves and ureters are unremarkable. The urinary bladder mucosa is unremarkable and contains no urine. The right and left kidneys weigh 100 grams each. The prostate gland and testes reveal no non-traumatic abnormality.

RETICULOENDOTHELIAL SYSTEM:
The spleen has a smooth, intact capsule covering pasty purple parenchyma; and grossly unremarkable. No enlarged lymph nodes are seen. The spleen weighs 120 grams.

ENDOCRINE SYSTEM:
See "Evidence of Injury".

The pituitary and thyroid glands are grossly unremarkable. The adrenal glands reveal no non-traumatic abnormalities.

MUSCULOSKELETAL SYSTEM:
See "Evidence of Injury".

Muscle development is normal. No non-traumatic muscle, bone or joint abnormalities are noted.

EVIDENCE COLLECTION

None collected during autopsy.

IDENTIFYING MARKS

A dark mustache and beard are present. No tattoos, major surgical scars or other identifying marks are noted.

NATURAL DISEASES

No evidence of natural diseases is identified during the autopsy examination.

MEDICAL INTERVENTION

None noted during autopsy.

POSTMORTEM CHANGES

The body is cold due to refrigeration. Livor is consistent with supine position. Rigor is present equally in all extremities. No significant decomposition changes are noted.

TOXICOLOGY

A. Volatiles (Blood and Vitreous fluid): No ethanol was detected.
B. Screened drugs of abuse and medications (Blood): None were found.

ADDITIONAL PROCEDURES

- Documentary photographs are taken by an OAFME photographer.
- Full body radiographs and computerized body scans are obtained.
- Specimens retained for toxicological and/or DNA identification are: Blood, vitreous fluid, bile, Gastric contents, and tissue samples from liver, lung, kidney, spleen, brain, psoas and heart muscles, and adipose tissue.
- Representative sections of organs are retained in formalin without preparation of histological slides.

FINAL AUTOPSY DIAGNOSIS

I. Blunt Force Injuries:

a. Injuries of the Head:
- Bilateral contusions of the intra-oral mucosa.
- Scleral hemorrhage, right side.

b. Injuries of the Neck:
- Extensive contusions of the neck.
- Focal areas of hemorrhage in the muscles of the neck, bilateral and posteriorly.
- Hemorrhage on the left side of the hyoid. No fractures noted.

c. Injuries of the Torso:
- Extensive contusions on the anterior and posterior torso with subcutaneous and intramuscular hemorrhage.
- Hemorrhage of intercostal spaces of the chest cavity, bilateral.
- Retroperitoneal hemorrhage, bilateral.
- Bilateral peri-renal and peri-adrenal and peri-pancreatic hemorrhages.
- Focal hemorrhages of the esophagus, small and large intestines, urinary bladder and prostate gland.

d. Blunt Force Trauma to the Extremities:
- Extensive subcutaneous and intramuscular hemorrhage of the right arm.
- Multiple contusions with subcutaneous and intramuscular hemorrhage of the lower extremities.

II. Neck Compression:
- See Injuries of the Neck above

III. Toxicology: No ethanol, screened medications or drugs of abuse were detected.

OPINION

(b)(6) an Iraqi detainee, died from blunt force injuries to his torso and extremities and possible asphyxiation by neck compression and/or smothering.

(b)(6) suffered extensive subcutaneous, intramuscular and retroperitoneal hemorrhages as well as peri-renal, peri-adrenal and peri-pancreatic hemorrhages. Though there was no evidence of skeletal fractures, the extent of the noted blunt force trauma and the resulting blood loss must have resulted in a non-reversible hemorrhagic shock. Also noted is the sternal and pericardial trauma which may have effects on the heart function and myocardial conduction system that cannot be definitively determined at autopsy. The injuries appear of the same age and are consistent with acute trauma. The multiplicity of injuries and distribution, anterior and posterior torso, extremities and the plantar surfaces of both feet are consistent with torture.

The distribution of the hemorrhage of the neck muscles is consistent with manual neck compression/strangulation. The applied force was enough to cause deep hemorrhage around the esophagus, but not enough to fracture the hyoid bone. Bilateral intraoral mucosal contusions/hemorrhage is noted and is consistent with applying pressure to both cheeks forcing a contact between the teeth and the oral mucosa, consistent with smothering or forceful attempt to silence the victim. Resulting asphyxia may have caused brain damage and contributed/hastened his death.

Toxicological studies on blood and vitreous fluid are negative for ethanol, screened medications and drugs of abuse.

In summar (b)(6) died from a combination of blunt force trauma and asphyxia by neck compression and smothering. 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 Social
BTB Qurunfir Al-Araki, Husayn Kazim,		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	[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	Blut force injuries and neck compression	Unknown
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		

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	
[ ] ACCIDENT Mort accidentelle		
[ ] SUICIDE Suicide	NAME OF PATHOLOGIST Nom du pathologiste (b)(6)	
[X] HOMICIDE Homicide	SIGNATUR (b)(6) DATE Date 25 May 2008	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)	
(b)(6) 2008 1055	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 décés 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 médcin 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 6/12/2008	SIGNA (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 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 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 EXAMINATION REPORT

Name: BTB Mosleh, Mohammed Mazeon
ISN: (b)(6)
Date of Birth: Unknown
Date of Death (b)(6) 2008
Date/Time of Autopsy: 31 MAY 2008 @ 0930 hrs
Date of Report: 27 AUG 2008

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

Circumstances of Death: This detainee was found unresponsive on his sleeping mat when, as reported, his fellow detainees notified the guards and the chief of the compound. Medical personnel were sent, but they detected no signs of life. The decedent was pronounced dead shortly thereafter.

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

Identification: The deceased is identified by transportation records. Postmortem fingerprints, postmortem dental x-rays, and DNA sample are obtained.

CAUSE OF DEATH: **BIVENTRICULAR DILATION (DILATED CARDIOMYOPATHY)**

MANNER OF DEATH: **NATURAL**

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished male. The body weighs 166 pounds, is 69 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 a beard and mustache. The irides are hazel/green. The corneae are clear. The conjunctivae and sclerae are unremarkable. The external auditory canals are free of foreign material. The external nares contain blood. The oral cavity displays white/yellow foam. 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 torso is unremarkable. No evidence of injury of the ribs or the sternum is evident externally. The right lower quadrant of the abdomen displays an area of green discoloration.[1] No healed surgical scars are noted. The external genitalia are those of a circumcised adult. The upper back displays acne. The anus is unremarkable.

For injuries pertaining to the lower extremities, see "Evidence of Injury" below. There is a scab of the lateral left ankle measuring ¼ inch in maximum dimension. The remainder upper and lower extremities are unremarkable with no signs of intravenous puncture marks. Both feet display calluses on the dorsal and plantar surfaces. The fingernails are intact. No tattoos are noted on the body.

CLOTHING AND PERSONAL EFFECTS

Items on the body:

- White t-shirt
- White boxers

MEDICAL INTERVENTION

None

RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates no skeletal abnormalities.

EVIDENCE OF INJURY

There is a 3/16 x 5/16 inch abrasion of the right cheek. There is a 1 ½ x 1 inch contusion of the right upper shin. There is a 3/16 x 1/8 inch superficial laceration on the dorsal surface of the left foot.[2]

1. Consistent with decomposition.
2. Consistent with terminal fall injuries

INTERNAL EXAMINATION

BODY CAVITIES:

The ribs, sternum, and vertebral bodies are visibly and palpably intact. No adhesions or abnormal collections of fluid are present in any of the body cavities. All body organs are present in normal anatomical position. The subcutaneous fat layer of the abdominal wall is 1/2inch thick.

HEAD (CENTRAL NERVOUS SYSTEM) 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 1420 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 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:

"CPCR"Please see "Cardiovascular Pathology Consultation Report" below. The heart weighs 400 grams and is contained in an intact pericardial sac. The pericardial sac contains 30 milliliters of yellow fluid. 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 atherosclerotic luminal stenosis. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

RESPIRATORY SYSTEM:

The upper airway displays white/yellow foam. The mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces are smooth, glistening and unremarkable bilaterally. The pulmonary parenchyma is diffusely congested, exuding blood and frothy fluid; no focal non-traumatic lesions are noted. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 750 grams; the left weighs 600 grams.

HEPATOBILIARY SYSTEM:

The liver weighs 1530 grams and has an intact smooth capsule covering moderately congested tan-brown parenchyma with no focal lesions noted. The gallbladder contains 7 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. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 200 of tan fluid and rice. 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 and left kidneys weighs 140 grams each. 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.

The tan bladder mucosa overlies an intact bladder wall. The bladder contains approximately 300 milliliters of yellow urine. The testes, prostate gland and seminal vesicles are unremarkable.

LYMPHORETICULAR SYSTEM:

The 200 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 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. The thymus weighs 20 grams and is unremarkable. No masses or areas of hemorrhage are identified.

MUSCULOSKELETAL SYSTEM:

The torso, back, anterior/posterior upper and lower extremities display no evidence of blunt force injury. 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 listed below:

Spleen, liver, adipose issue (slide 1): No pathological diagnosis

Left kidney and left lobes of the lung (slide 2): No pathological diagnosis, kidney with mild autolytic change, and lung sections display vascular congestion

Right kidney and pancreas (slide 3): No pathological diagnosis, kidney with mild autolytic change, and pancreas with diffuse autolytic change

Right lobes of the lung (slide 4): No pathological diagnosis

Adrenal glands (slide 5): No pathological diagnosis, mild autolytic change

Prostate gland (slides 6 & 7): No pathological diagnosis

Thyroid gland (slide 8): No pathological diagnosis

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, urine, bile, gastric contents, spleen, liver, lung, kidney, adipose tissue and skeletal muscle.
4. The dissected organs are forwarded with body.

CARDIOVASCULAR PATHOLOGY CONSULTATION REPORT

FINAL DIAGNOSIS

DIAGNOSIS: (b)(6) **Biventricular dilatation (dilated cardiomyopathy)**

History: approximately 30 year old detainee found unresponsive in his cell, no evidence of foul play, toxicology negative

Heart: 420 grams; mildly increased epicardial fat; patent foramen ovale; biventricular dilatation: left ventricular cavity diameter 45 mm, left ventricular free wall thickness 12 mm, ventricular septum thickness 15 mm, right ventricle thickness 4 mm, without gross scars or abnormal fat infiltrates; mild endocardial thickening in left ventricular outflow tract; grossly unremarkable valves; no gross myocardial fibrosis or necrosis; histologic sections show mild left ventricular myocyte hypertrophy with patchy subendocardial interstitial fibrosis, otherwise unremarkable

Coronary arteries: Normal ostia; right dominance; no gross atherosclerosis

Conduction system: The sinoatrial node and sinus nodal artery are unremarkable. The compact atrioventricular (AV) node shows mild fragmentation within the central fibrous body, but is otherwise unremarkable. There is no dysplasia of the AV nodal artery. Focal adipose tissue and increased vascularity are present in the penetrating bundle, but there is no inflammation. The left proximal bundle branch is intact, and the right bundle branch is not seen in the sections. There are no discernible accessory conduction pathways between the AV node and ventricular septum.

Comment: There is biventricular dilatation, consistent with a non-ischemic cardiomyopathy. However, we cannot determine whether there is significantly increased heart weight without knowing the body weight of the deceased. A 420 gram heart would be a predicted normal weight for an adult male weighing approximately 255 lbs and is at the 95% upper confidence limit for someone weighing approximately 148 lbs. The etiology of dilated cardiomyopathy is unknown in up to 50% of cases.

(b)(6)

Medical Director

Blocks made: 11 (5 routine heart, 6 conduction system)
Slides made: 17 (11 H&E, 6 Movat)

FINAL AUTOPSY DIAGNOSES

I. **Biventricular Dilatation (Dilated Cardiomyopathy)**

II. **Evidence of Injury**
- A. Abrasion of the right cheek
- B. Contusion of the right upper shin
- C. Superficial laceration on the dorsal surface of the left foot

III. **Evidence of Medical Therapy:** None identified

IV. **Post-Mortem Changes:** As described above

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

VI. **Toxicology(AFIP)**
- A. CARBON MONOXIDE: Saturation in the blood was less than 1%
- B. CYANIDE: No cyanide detected in the blood
- C. VOLATILES: No ethanol detected in the blood and vitreous fluid
- D. DRUGS OF ABUSE: None were found in the urine

OPINION

This detainee (b)(6) died from complications of biventricular dilatation (dilated cardiomyopathy) that likely resulted in a cardiac arrhythmia (conduction abnormality).[3] Toxicology screen was negative. The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

(b)(6)

(b)(6) Medical Examiner

3. Akar, F. G. "Conduction abnormalities in nonischemic dilated cardiomyopathy: basic mechanisms and arrhythmic consequences." Trends Cardiovasc 15 (2005): 259-64.

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 Mosleh, Mohammed, Mazeon		Civilian	(b)(6)

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

RACE Race		MARITAL STATUS État Civil			RELIGION Culte		
[X]	CAUCASOID Caucasique		SINGLE Celibataire	DIVORCED Divorce		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 CONDITION DIRECTLY LEADING TO DEATH [1] Maladie ou condition directement responsable de la mort	Biventricular Dilation (Dilated Cardiomyopathy)	
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		

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 31 May 2008	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) 2008	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 de lontet je conclue que le décès est survenu à l'heure indiquée et a, 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	
8/22/2008	(b)(6)

[1] State disease, injury or complication which caused death
[2] State conditions contributing to the death, but not relati
[1] Préciser la nature de la maladie, de la blessure ou de la complication qui a provoqué 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), 26 SEP 75, WHICH ARE OBSOLETE.

MEDCOM 1038

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 Marush, Muhammad Fahdil Khamat
SSAN: (b)(6)
Date of Birth (b)(6) 1968
Date of Death (b)(6) 2008
Date and time of Autopsy: 10 DEC 2008 9:00 AM
Date of Report: 06 FEB 2009

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

Circumstances of Death: Iraqi detainee with history of remote penetrating head injury found unresponsive

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

Identification: Positive identification by Fingerprint

CAUSE OF DEATH: Complications of penetrating head injury

MANNER OF DEATH: Undetermined

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished male that weighs 139 pounds, is 69 inches in length and appears compatible with the reported age of 40 years. The body is cold after refrigeration. 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 shows evidence of medical therapy to be further described below. The scalp hair is black and shaved. Facial hair consists of a black mustache and beard. The irides are brown. The corneae are clear. The conjunctivae 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 and maxilla are palpably intact. The lips are without evident injury. There are multiple remotely missing maxillary and mandibular teeth. The remaining teeth are natural and in fair 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. A healed 7 inch scar is present on the medial surface of the left upper arm and 2 ¼ inch scar is present on the lateral surface. The external genitalia are those of a normal adult circumcised male. The posterior torso and anus are without note. The extremities show evidence of injury to be further described below. The fingernails are intact. (b)(6) tattoo (b)(6)
(b)(6) tattoo (b)(6)
(b)(6)

CLOTHING AND PERSONAL EFFECTS

- The body is received nude for examination.

MEDICAL INTERVENTION

- A gauze bandage is present over the head
- An 11 ½ inch stapled incision extends across the biparietal and frontal regions of the scalp
- A 2 ½ inch stapled incision extends posteriorly from the biparietal incision to the right parietal region
- A 2 inch stapled incision extends posteriorly from the biparietal incision to the left parietal region
- Three drains exit the scalp in the occipital vertex region
- Internal examination shows a bilateral craniectomy with removal of the majority of the biparietal regions of the calvarium
- Sutured therapeutic needle puncture sites are present in the right subclavian region and the right inguinal region

RADIOGRAPHS

A complete set of postmortem radiographs is obtained and, in addition to the above demonstrates multiple metallic fragments in the left frontal region. These are not recovered.

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.

Injuries of the head and neck:

There is an 8 x ¾ inch cluster of punctate abrasions on the forehead. A ⅜ x ¼ inch healing wound is present on the left side of the forehead.

Injuries of the extremities:

Incision of both wrists reveals subcutaneous hemorrhage of the dorsal radial surfaces measuring up to 2 inches on the right and up to 1 ¾ inches on the left.

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 or abnormal collections of fluid are present in any of the body cavities. All body organs are present in normal anatomical position. The subcutaneous fat layer of the abdominal wall is ¼ inch thick.

HEAD AND CENTRAL NERVOUS SYSTEM:
(See above "Evidence of Therapy")

The scalp is reflected. The galeal and subgaleal soft tissues of the scalp are free of injury. There are no skull fractures. The remainder of the calvarium is removed. Approximately 1 ml of turbid liquid material is expressed from the anterior region of the remaining central dura. The structures at the base of the brain, including cranial nerves and blood vessels are intact. The brain weighs 1700 grams. The atlanto-occipital joint is stable. The upper spinal cord is unremarkable. (See Neuropathological Consultation)

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.

CARDIOVASCULAR SYSTEM:

The 340 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 widely patent lumina. The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. 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 pleural surfaces are smooth, glistening and unremarkable bilaterally. The pulmonary parenchyma is diffusely congested, exuding slight to moderate amounts 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 680 grams; the left 500 grams.

HEPATOBILIARY SYSTEM:

The 1180 gram liver has an intact smooth capsule covering moderately congested tan-brown parenchyma with no focal lesions noted. The gallbladder contains 12 ml of thick green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of formed calculi, however, the bile contains numerous yellowish-tan particles. The gallbladder is mildly distended.

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 300 ml of tan food material. The small and large bowel 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 140 grams; the left 160 grams. The renal capsules are smooth, 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. White bladder mucosa overlies an intact bladder wall. The bladder is empty. The testes, prostate gland and seminal vesicles are without note.

LYMPHORETICULAR SYSTEM:

The 180 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 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.

NEUROPATHOLOGICAL CONSULTATION

GROSS DESCRIPTION:

Brain weight: 1528 gm

The specimen consists of an irregular 6 x 4 cm fragment of dura and the brain of an adult. The central portion of the dura is thickened and sclerotic. The subdural surface is covered by a 0.2 - 0.4 cm thick granular red-brown layer of adherent coagulated blood which contains fine shiny particles consistent with metallic fragments. There is a deep groove due to cerebral craniectomy herniation over each cerebral hemisphere. On the right, the area of cerebral herniation is approximately 12 x 8 cm and involves the dorsal/lateral surfaces of the frontal and parietal lobes and the anterior/lateral occipital lobe. On the left the area of the craniotomy herniation is 8 x 6 cm and involves the dorsal/lateral frontal lobe and the anterior and lateral temporal lobe. There are multifocal, small perivascular subarachnoid hemorrhages along the cortical grooves of the craniectomy herniation. The herniated cerebral cortex is markedly swollen, discolored a dusky gray and focally hemorrhagic and necrotic. There is no net midline shift due to the decompressive effect of the craniectomies but there is severe central transtentorial and transforamen magnum herniation. Deep bilateral tentorial grooves indent each uncus approximatcly 0.8 cm from the medial margins and the herniated cortex is necrotic. The diencephalon and internal capsules are markedly compressed elongated and hemorrhagic due to central transtentorial herniation. These hemorrhages are continuous with Duret hemorrhages in the tegmentum and base of the pons and the midbrain. A deep foramen magnum groove indents each cerebellar tonsil. The leptomeninges are moderately cloudy over the cerebral convexities. Elsewhere, they are thin, delicate and transparent. The perisellar, perimesencephalic and cerebellomedullary cisterns are compressed and effaced due to brain swelling. The arteries at the base of the brain follow a normal distribution and there are no aneurismal dilatations or sites of occlusion.

Coronal sections of the cerebrum reveal the above noted changes. There is cavitary necrosis of the left frontal lobe and disruption of the frontal pole cortex. The cavity causes destruction of the left frontal white matter, the striate body, the anterior corpus callosum, the septum pellucidum and the fornices.

MICROSCOPIC EXAMINATION:

Blocks of tissue for microscopic examination are removed from: (1) left frontal lobe, (2) midcorpus callosum/caudate/internalcapsule, (3) left hippocampus, (4) left thalamus/subthalamus/substantianigra, (5) right parietal lobe, (6) left occipital lobe (calcarinecortex), (7) cerebellum, (8) midbrain and (9) pons Sections from each block are stained with H&E, and LFB techniques and immunostained for GFAP and β-amyloid.

MICROSCOPIC FINDINGS:

Sections show generalized acute brain edema, congestion, focal hemorrhages and bland necrosis with no inflammation or granulation tissue. The hemorrhages are related to the craniectomy herniation margins as well as the subthalamic and rostral brainstem (Duret hemorrhages). There is no accumulation of macrophages and there is no leptomeningeal inflammation. This suggests that the severe brain swelling and central herniation resulted in compression of the penetrating blood vessels with necrosis without cellular infiltrate because of compression of regional blood flow. Surrounding the damaged areas there is widespread axonal injury (positive axons) in a vascular pattern.

COMMENT:

The pattern is consistent with a process such as cerebritis associated with metallic foreign bodies due to a penetrating injury resulting in massive brain swelling requiring bilateral craniectomies. The antibiotic treatment with drainage may have obscured the inflammation but the brain swelling progressed to central transtentorial herniation with subthalamic and rostral brainstem herniation hemorrhages.

ADDITIONAL PROCEDURES

1. Documentary photographs are taken by the OAFME photographer.
2. Specimens retained for toxicology testing and/or DNA identification are: vitreous fluid, blood, spleen, liver, lung, kidney, myocardium, bile, gastric contents, adipose tissue and psoas muscle.
3. The brain is retained for further examination. The remaining dissected organs are forwarded with the body.
4. Selected portions of organs are retained in formalin.

FINAL AUTOPSY DIAGNOSES

I. History of penetrating head injury
   A. Cavitary necrosis of the left frontal lobe
   B. Cerebral edema
      1. Cerebral craniectomy herniation with focal hemorrhage and necrosis
      2. Central transtentorial herniation with subthalamic and rostral brainstem herniation hemorrhages
   C. Retained intracranial metallic fragments

II. Additional injuries:
   A. Punctate abrasions of the forehead
   B. Healing wound of the left side of the forehead
   C. Blunt force injury of both wrists

III. Additional findings:
   A. Bilateral pulmonary congestion (right 680 mg, left 500 mg)

IV. Toxicology: Lidocaine present in the blood

OPINION

This 40 year old male civilian died of complications arising from penetrating head injury. According to reports, the decedent presented with a history of previous gunshot wound of the head with complaints of headache, diplopia, emesis and dizziness. He underwent CT and bilateral craniectomies for brain edema. The decedent's clinical status steadily declined postoperatively until his demise.

Autopsy examination showed extensive cerebral edema (brain swelling), cavitary necrosis of the left frontal lobe and minute metallic fragments. Additional injuries included punctate abrasions of the forehead (consistent with medical therapy) and evidence of blunt force injury to both wrists. No evidence of additional significant injury or natural disease was identified. Postmortem toxicological examination showed only the therapeutic agent lidocaine.

Since the exact etiology of the penetrating injury and the circumstances under which it occurred are uncertain, the manner of death is best classified as undetermined.

(b)(6)

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

CERTIFICATE OF DEATH *(OVERSEAS)*
Acte dé 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 Marush, Muhammad, Fahdil Khamat		Civilian	(b)(6)
ORGANIZATION Organisation	**NATION** (e.g. United States) Pays	**DATE OF BIRTH** Date de naissance	**SEX** Sexe
	Iraq	(b)(6) 1968	[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) UNK
[ ]	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.	Complications of penetrating head injury	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 [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 : Undetermined
[ ] ACCIDENT Mort accidentelle	MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie	
[ ] SUICIDE Suicide	NAME OF PATHOLOGIST Nom du pathologiste (b)(6)	
[ ] HOMICIDE Homicide	SIGNATURE (b)(6) DATE Date 10 December 2008	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) 2008 2245	Air Force Theater Hospital, Joint Base Balad 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 médecin militaire ou du médecin assermenté	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 2/10/2009	SIGNATURE (b)(6)

[1] State disease, injury or complication which caused death, but not mode of dying such as heart failure, ect.
[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 le 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.

(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 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: BTB HUSAYN, Husayn Kazim
SSAN (b)(6)
Date of Birth: (b)(6) 1972

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

Date of Death: (b)(6) 2008
Place of Death: 115th Combat Support Hospital, Camp Bucca, Iraq

Date and Time of Autopsy: 27 SEP 2008, 1130
Place of Autopsy: Port Mortuary, Dover AFB, DE

Date of Report: 5 NOV 2008

Circumstances of Death: This 35-year-old male detainee reportedly was sitting in a holding room when he collapsed with seizure like activity. First responders initiated cardiopulmonary resuscitation (CPR) immediately and continued for 15 minutes until medical personnel arrived on scene. Upon medic arrival, the decedent was noted to have no vital signs. He was taken to the 115th Combat Support Hospital at Camp Bucca where he was pronounced dead shortly after arrival.

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

Identification: Presumptive identification by incarceration number

CAUSE OF DEATH: Undetermined

MANNER OF DEATH: Undetermined

On 27 September 2008 at 1130, a complete postmortem examination is performed on the body of (b)(6) who was presumptively identified by his incarceration number.

CID Special Agent (b)(6) attends the autopsy.

EXTERNAL EXAMINATION

The body is received dressed in a white tee shirt, yellow pants, and white boxers. The body is that of a well-developed, well-nourished, adult male that is cold from refrigeration. He is 66 inches long, weighs 123 pounds, and appears consistent with the reported age of 35 years. Rigor mortis is dissipated. Postmortem lividity is fixed on the posterior surface of the body with moderate suffusion of the head and shoulders.

The head is covered with short black mixed with gray hair in a normal distribution. The irides are brown, corneas are dull, and the sclerae are white. The pupils are round and equal in diameter. No contact lenses are present. Scattered conjunctival petechiae are seen in both eyes. The nose is unremarkable. No foreign material is present in the nostrils or the oral cavity. The lips and frenula are atraumatic. Natural teeth are present with severe dental carries. The external auditory canals are free of blood. The ears are unremarkable and not pierced. The face has a well trimmed mustache and beard. The neck has no masses or deformities. The chest is covered with hair with no increase in the anteroposterior diameter. The abdomen is covered by hair and not distended. The external genitalia are those of a circumcised adult male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The anus and buttocks are unremarkable. There are confluent areas of Tardieu-like spots on the lateral aspect of the back. The upper and lower extremities are symmetric and without clubbing or edema.

The following tattoos are seen on the body.

- (b)(6)
-
-

CLOTHING AND PERSONAL EFFECTS

- White tee shirt
- Yellow pants
- White boxer short

MEDICAL INTERVENTION

- Endotracheal tube inserted appropriately
- Intravenous catheter inserted in the right antecubital fossa

POSTMORTEM ARTIFACTS

None

RADIOGRAPHS

A complete set of total body postmortem radiographs is obtained and shows evidence of medical therapy. No fractures or foreign materials are seen.

EVIDENCE OF INJURY

The chest has an approximately 5 x 2-inch contusion at the midchest section, slightly right of the anterior midline. The sternum is fractured at the level of the 4th rib. There is a focal hemorrhage of the external muscle tissue of the right 4th intercostal space.

INTERNAL EXAMINATION

BODY CAVITIES:
The body is opened with a standard Y-shaped incision. The abdominal panniculus is 2.5-cm thick at the umbilicus. The muscles of the chest and abdominal walls are normal. The rib cage, sternum, and clavicles are intact. The mediastinum is unremarkable. The visceral and parietal pleural surfaces are smooth and glistening except for several foci of pleural adhesions of the anterior and apical aspects of both lungs. There is no blood or fluid in the pericardial sac or the peritoneal cavity. The right and left pleural cavities contain 20 ml and 10 ml of clear fluid, respectively. The organs occupy their usual anatomic positions within the pleural and peritoneal cavities. There is no evidence of pericarditis or peritonitis. The omentum and retroperitoneum are unremarkable.

HEAD AND CENTRAL NERVOUS SYSTEM:
The cranial cavity is opened with a coronal incision of the scalp and removal of the calvarium. The galeal and subgaleal soft tissues of the scalp are free of injury. The calvarium is intact, as is the dura mater beneath it. There is no evidence of epidural, subdural, or subarachnoid hemorrhage. The brain weighs 1520 gm. The leptomeninges are transparent. The gyral pattern and sulci are unremarkable. The major vessels at the base of the brain have the usual anatomic distribution and no significant atherosclerosis is found. The cranial nerves are symmetrical and intact. No evidence of herniation is present. Coronal sections through the cerebral hemispheres reveal no lesions. The ventricles are of normal size and contain clear cerebrospinal fluid. Transverse sections through the brain stem and cerebellum are unremarkable. There are no skull fractures. The atlanto-occipital joint is stable. The spinal cord is not examined in its entirety.

NECK:
The larynx and trachea are in the midline. There is no hemorrhage in the skin, fat or sternocleidomastoid muscles of the anterior neck. In situ layer-wise dissection of the neck's strap muscles shows no abnormalities. The thyroid cartilage and hyoid bone are intact. The larynx has smooth pink-tan mucosa without focal lesions. No foreign material is present. The tongue is free of bite marks, hemorrhage, or other injuries. The soft tissues of the neck are free of hemorrhage. No fractures or dislocations of the cervical vertebrae are detected.

CARDIOVASCULAR SYSTEM:
The 340-gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. There are no epicardial petechiae. The coronary arteries are present in a normal distribution with a right dominant pattern. Multiple cross sections of the vessels show focal soft atheroma in the left anterior descending and left circumflex coronary arteries. The left main coronary artery is patent. The left anterior descending coronary artery is focally (75%) narrowed at approximately 3 cm downstream from the origin and 50% focal narrowing of the lumen within 1 cm distal of the more severe lesion. The circumflex coronary artery shows focal 25% narrowing of its lumen. The right coronary artery is grossly unremarkable. Thrombosis of the coronary arteries is not present. The myocardium is homogenous, dark red-brown, and soft with no gross myocardial fibrosis noted. No defects in the atrial or ventricular septa are present. The valve leaflets are thin and mobile. The circumferences of the cardiac valves are within normal limit for age and heart size. The left ventricle measures 1.4 cm, right ventricle 0.4 cm, and interventricular septum 1.3 cm in thickness. The endocardium is smooth and glistening.

The aorta gives rise to three intact and patent arch vessels. There are soft atheromas of the intima throughout its length. No evidence of aneurysm, coarctation, dissection, or laceration of the aorta is noted. The renal and mesenteric vessels are unremarkable.

RESPIRATORY SYSTEM:
The right and left lungs weigh 760 and 700 gm, respectively. The trachea is complete, without malformation, from the larynx to the carina. There is no aspirated gastric material or aspirated blood in the trachea. The lungs and hilar nodes are moderately anthracotic. There are several small blebs of approximately 2 – 3 mm in maximum dimension at the apex of the upper lobe of the right lung. On cut section, there is no aspirated blood apparent. The pulmonary parenchyma is diffusely congested and edematous. There is no consolidation present. The upper lobe of the left lung has a small focus of calcification near the periphery. There is no pulmonary contusion. Pulmonary thromboemboli are not present.

HEPATOBILIARY SYSTEM:
The 1280-gm liver has a smooth capsule and a sharp anterior border. The parenchyma is reddish-brown and has a lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder is present and contains green-black mucoid bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

HEMOLYMPHATIC SYSTEM:
The 80-gm intact spleen has a red, purple capsule. The parenchyma is maroon, with distinct Malpighian corpuscles. Lymph nodes are not prominent in the cervical region, thoracic or peritoneal cavities.

UROGENITAL SYSTEM:
The right and left kidneys weigh 120 and 140 gm, respectively. The renal capsules strip with ease from the underlying smooth cortical surfaces. There is a small 4-mm simple cyst containing clear fluid on the right cortical surface. The cut surfaces are red-tan, with uniformly thick cortices and sharp corticomedullary junctions. The kidneys are congested. The pelves are unremarkable and the ureters are normal in course and caliber. There are no stones or tumors in

the kidneys, pelves, ureters, or bladder. White bladder mucosa overlies an intact bladder wall. The bladder contains a scant amount of 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 200 ml of dark tan-brown congealed food particles. The gastric mucosa shows no focal lesion. The gastric wall is intact. The small and large intestines are unremarkable. The appendix is present.

ENDOCRINE SYSTEM:
The thyroid gland is normal in size and symmetric with dark red-brown parenchyma. No masses are present.

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

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

MUSCULOSKELETAL SYSTEM:
The vertebral column and pelvis are visibly and palpably intact. The musculature is normally developed and of the usual color and consistency.

OTHER PROCEDURES

1. Photographic evidence is obtained by the OAFME photographers.
2. Specimens for toxicology: blood, bile, vitreous, urine, gastric content, liver tissue, kidney tissue, lung tissue, spleen tissue, brain tissue, heart tissue, and adipose tissue.
3. Specimen for DNA analysis: psoas muscle.
4. Representative tissue samples are retained in formalin.
5. Dissected organs are forwarded with the body.
6. Clothing articles are retained by CID.

MICROSCOPIC EXAMINATION

Slide key:
(1) Left anterior descending coronary artery; (2) Sinoatrial (SA) nodal region; (3 – 4) Atrioventricular (AV) nodal region; (5) Anterior left ventricular wall; (6) Lateral left ventricular wall; (7) Posterior left ventricular wall; (8) Interventricular septum; (9 – 13) Lungs; (14) Liver, spleen, pancreas; (15) Kidneys, adrenal glands, thyroid; (16) Pons; (17) Medulla; (18) Upper cervical cord; (19) Cerebellum; (20) Frontal lobe; (21) Hippocampus; (22) Basal ganglia; (23) Occipital lobe.

Heart: left anterior descending coronary artery shows thickening of the intima with foamy macrophages and fibrosis resulting in approximately 50% luminal narrowing. See consultation report below for additional information.

Lungs: congestion and moderate anthracosis, mild emphysematous changes of the periphery

Liver: portal areas show no increase in inflammatory cells infiltrate with unremarkable arterial and bile duct structures, mild congestion of the central vein regions

Spleen: no pathologic changes

Pancreas: autolyzed

Kidneys: congestion

Adrenal glands: congestion

Thyroid: no pathologic changes

Brain and spinal cord: no pathologic changes

ARMED FORCES INSTITUTE OF PATHOLOGY CONSULTATION
Cardiovascular Pathology

There is mild to moderate atherosclerosis of the LAD with --- intimal thickening with minimal intraplaque hemorrhage. The conduction fibers at the level of the penetrating / branching bundles demonstrate dilated vascular space (? lymphatic) and a small amount of fat which is a natural variant. I do not identify a morphologic substrate for sudden death. The few lymphocytes in the atrial tissue on slide 2 are of no significance.

(b)(6)

Chief of Cardiovascular Pathology

FINAL AUTOPSY DIAGNOSES:

I. Natural disease diagnoses
- A. Mild to moderate atherosclerotic cardiovascular disease
  - a. Gross 50 – 70% luminal narrowing of the left anterior coronary artery
  - b. Gross 25% luminal narrowing of the circumflex artery
  - c. Soft atheroma of the aorta
- B. Mild emphysematous changes of the lung with small peripheral air blebs
- C. Simple cortical cyst of the right kidney

II. Other finding
- A. Pulmonary congestion and edema
- B. Moderate pulmonary anthracosis

III. Medical therapy
- A. Cardiopulmonary resuscitation injuries
  - a. Fracture of the sternum
  - b. Focal hemorrhage of the external muscle tissue of the right 4th intercostal space
  - c. Contusion at the midchest section
- B. Endotracheal tube inserted appropriately
- C. Intravenous catheter inserted in the right antecubital fossa

IV. Identifying marks
- A. (b)(6)
- B.
- C.

V. Toxicology results
- A. No ethanol detected in the blood and vitreous fluid
- B. Carboxyhemoglobin saturation in the blood less than 1%
- C. No cyanide detected in the blood
- D. No common screened drugs detected in the blood, except atropine

OPINION

This 35-year-old male died from unknown causes. The terminal event of a sudden collapse suggested a cardiac anomaly as a possible cause of death. The autopsy revealed mild to moderate atherosclerotic cardiovascular disease, however, no definitive anatomical cause of death could be identified. Toxicology analysis of the postmortem sample was negative for volatiles, carbon monoxide, cyanide, and common screened drugs. The focal injuries of the chest were most consistent with cardiopulmonary resuscitation.

Based on available investigation and autopsy finding, the cause and manner of death are classified as undetermined.

(b)(6)

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

(b)(6)

(b)(6) **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
Husayn, Husayn, Kazim		Civilian	(b)(6)
ORGANIZATION Organisation	NATION (e.g. United States) Pays: Iraq	DATE OF BIRTH Date de naissance	SEX Sexe ☐ MALE ☐ FEMALE

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

				OTHER (Specify) Autre (Spécifier)
			X	

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	Undetermined	
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	CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures
☐ NATURAL Mort naturelle	☒ YES Oui ☐ NO Non	Mode of Death : Undetermined
☐ ACCIDENT Mort accidentelle	MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie	
☐ SUICIDE Suicide	NAME OF PATHOLOGIST Nom du pathologiste (b)(6)	
☐ HOMICIDE Homicide	SIGNATURE (b)(6) DATE Date 27 September 2008	AVIATION ACCIDENT Accident à Avion ☐ YES Oui ☒ 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) 2008	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 11/10/2008	SIGNATURE (b)(6)

[1] State disease, injury or complication which caused death, but not mode of dy
[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 constitué à la mort, mais non la manière de mourir, tele 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), 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 EXAMINATION REPORT

Name: (BTB) HASAN, Mahmud Rashid
ISN: (b)(6)
Date of Birth: (BTB) (b)(6) 1967
Date of Death (b)(6) 2008
Date/Time of Autopsy: 5 AUG 2008 @ 1315 hrs
Date of Report: 10 OCT 2008

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

Circumstances of Death: This 41-year-old detainee was admitted to the combat hospital ICU complaining of weakness, nausea, and headaches. He was initially diagnosed with pneumonia and was treated with antibiotics. His condition continued to decline and he progressed into a coma. The preliminary diagnosis for his condition was lung cancer with brain metastasis. He was pronounced dead on (b)(6) 2008.

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

Identification: Presumptive identification per CID investigation.

CAUSE OF DEATH: **METASTATIC CARCINOMA**

MANNER OF DEATH: **NATURAL**

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished nude male. The body weighs 126 pounds, measures 67 inches in length, and appears compatible with the reported age of 41 years. 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/grey. Facial hair consists of black/grey mustache and beard. The irides are brown. The corneae are cloudy. The conjunctivae and sclerae are unremarkable. 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. There are lower partial dentures and the upper teeth are natural. 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 unremarkable. No healed surgical scars are noted. The external genitalia are those of an adult male. The posterior torso and anus are unremarkable.

Callous formation is present on the base of the feet. The fingernails are intact.

CLOTHING AND PERSONAL EFFECTS

None identified.

MEDICAL INTERVENTION

- EKG leads on left lateral arm and left lower abdominal quadrant
- Numerous needle puncture marks surrounded by contusions measuring up to 2 ½ inches in maximum dimension involving the bilateral antecubital fossae, bilateral anterior forearms, and anterior right wrist

RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates the following abnormalities listed below.

EVIDENCE OF INJURY

None identified at autopsy.

INTERNAL EXAMINATION

BODY CAVITIES:

No abnormal collections of fluid are present in any of the body cavities. All body organs are present in normal anatomical position. The subcutaneous fat layer of the abdominal wall is 2 inches thick.

HEAD (CENTRAL NERVOUS SYSTEM) AND NECK:

See "Neuropathology Consultation" Report below. 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. 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 1450 grams and has edematous gyri and sulci. 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. Incision and dissection of the posterior neck demonstrates no deep paracervical muscular injury and no cervical spine fractures.

CARDIOVASCULAR SYSTEM:

The 360gram 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 mild (less than 25%) focal atherosclerotic luminal stenosis of the left anterior descending coronary artery and the others are unremarkable.

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 1.2, 0.8, and 0.2 centimeter thick, respectively. The endocardium is smooth and glistening. The aorta displays atherosclerotic streaks and 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. There is a right upper lobe pleural adhesion and the remaining surface showing a smooth, glistening appearance. The pulmonary parenchyma displays multiple tan lesions measuring up to 0.7 centimeters in maximum dimension involving the right upper, left upper, and left lower lobes of the lungs. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 780grams and the left lung weighs 650 grams.

HEPATOBILIARY SYSTEM:

The 1520 grams liver has an intact smooth capsule covering moderately congested tan-brown parenchyma with multiple tan lesions measuring up to 1 centimeter in maximum dimension.

The gallbladder contains 6 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. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 150 milliliters of green fluid. 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 and left kidneys weighs 90 grams. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, red-brown cortical surface. There are multiple tan lesions in both kidneys which measure up to 1 centimeter in maximum dimension. The cortices are sharply delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelves and ureters are unremarkable. The 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 50 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 left adrenal gland has a tan lesion that measures 0.8 centimeter in maximum dimension. The right adrenal gland is unremarkable.

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:

Right Upper Lobe (slide 1), Right Middle and Lower lobes of lung (slide 2), Liver (slide 3), left lower lobe of lung (slide 4), left upper lobe and spleen (slide 5), left kidney (slide 6), left adrenal (slide 7), and right kidney (slide 8): sections of the organs display areas of metastatic carcinoma with pleomorphic nuclei admixed with necrosis. The spleen and right middle/left lower lobes of the lung displayed on metastatic involvement.

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, gastric contents, spleen, liver, lung, kidney, myocardium, adipose tissue and skeletal muscle.
4. The dissected organs are forwarded with body.

NEUROPATHOLOGY CONSULTATION

FINAL DIAGNOSIS

GROSS DESCRIPTION:

Brain weight: 1437 gm

The specimen consists of the intracranial dura and brain of an adult.

The intracranial dura is not remarkable. The venous sinuses are patent.

The brain is markedly swollen with wide, flattened gyri and compressed sulci. The perisellar, perimesencephalic and basal cisterns are completely effaced due to swelling. Deep tentorial grooves indent each uncus approximately 1 cm from the medial margin on the right and 0.8 cm on the left due to downward transtentorial pressure. The cerebellar tonsils are deeply molded by the foramen magnum due to downward trans-foramen magnum intracranial pressure. A regional nonhemorrhagic (artefactual) disruption of a 4 x 4.5 cm area of the right lateral parietal lobe communicates with an approximately 5 x 5 x 4.5 cm cavity of the right posterior/inferior frontal and anterior occipital lobe white matter. Accompanying the brain is a firm, friable, 4.5 x 5 x 4 cm pink-tan neoplastic mass consistent with metastatic neoplasm, with diffuse necrotic, granular yellow-white cut surfaces which has been artifactually extruded from the above noted right frontal occipital cerebral cavity.

The leptomeninges are thin, delicate and transparent. The midbrain and pons are markedly enlarged. The arteries at the base of the brain follow a normal distribution and there are no aneurysmal dilatations or sites of occlusion. All the identifiable cranial nerve roots are not remarkable.

Coronal sections of the cerebrum reveal marked white matter edema and swelling of the right frontal lobe associated with the above noted neoplasm with effacement of the

gray/white matter margins and right trans-falcine cingulate gyrus herniation due to leftward pressure across the falx cerebri. The adjacent right lateral ventricle is partially collapsed and the opposite left ventricle is enlarged reflecting partial compression of the left foramen of Munro.

A second granular friable mass (3.5 x 4 x 3.5 cm), similar to the above described lesion is situated in the posterior-inferior right frontal lobe and invades the lateral basal ganglia and the sub-insular cortex.

There is multifocal hemorrhage and necrosis of the right inferior thalamus and the bilateral subependymal areas of each thalamus. A 0.3 to 0.5 cm thick layer of granular, friable neoplastic tissue similar to the above lesions encases the occipital horn of the left lateral ventricle.

Sections of the midbrain and pons show marked swelling due to tegmental Duret hemorrhages and necrosis. The tegmentum of the medulla is edematous. The substantia nigra and locus coeruleus are well pigmented.

PHOTOGRAPHS: yes

MICROSCOPIC EXAMINATION:

Blocks of tissue for microscopic examination are removed from: (1) right lateral frontal lobe, (2) right striate body, (3) right insular tumor, (4) right lateral parietal lobe, (5) external tumor, (6) pons, (7) cerebellum, (8) left occipital lobe, (9) medulla, (10) dura and (11) right hippocampus.

Sections from each block are stained with H&E, Bielschowsky and LFB techniques and immunostained for β–APP, GFAP, β–amyloid, Tau-2, ubiquitin, synuclein.

DIAGNOSIS:

Multifocal (right frontal, right parietal/occipital, left occipital) metastatic, anaplastic, necrotic carcinoma with:

1. Extensive perineoplastic edema
2. Trans-falcine (leftward), trans-tentorial and trans foramen magnum herniation
3. Duret hemorrhage of midbrain and rostral pons tegmentum.
4. Partial obstruction of left foramen of Munro

(b)(6)

NEUROPATHOLOGIST

FINAL AUTOPSY DIAGNOSES

I. Metastatic Carcinoma
- A. Multifocal (right frontal, right parietal/occipital, left occipital) lesions of the brain
- B. Carcinoma with pleomorphic nuclei admixed with necrosis
- C. Extensive perineoplastic edema
- D. Trans-falcine (leftward), trans-tentorial and trans-foramen magnum herniation
- E. Duret hemorrhage of midbrain and rostal pons tegmentum
- F. Partial obstruction of left foramen of Munro
- G. Tumor involvement of the bilateral lungs, left adrenal gland, liver, and kidneys

II. Pre-existing Natural Disease:
- A. Bilateral emphysematous lungs
- B. Atherosclerotic cardiovascular disease
  1. Left anterior deceasing, focal/mild
  2. Aorta, atherosclerotic streaks present

III. Evidence of Medical Therapy: As described above

IV. Post-Mortem Changes: As described above

V. Identifying Body Marks: None identified

VI. Toxicology (AFIP):
- A. VOLATILES: No ethanol detected in the blood and vitreous fluid
- B. DRUGS: No screened drugs of abuse/medications detected in the urine
- C. CYANIDE: No cyanide detected in the blood
- D. CARBON MONOXIDE: Carboxyhemoglobin saturation in the blood was less than 1%.

OPINION

This 41-year-old detainee (b)(6) died of clinically diagnosed lung cancer which spread (metastasized) to the brain, left adrenal gland, liver, and kidneys. The primary tumor was not identified in the lungs. However, the metastasized tumors were of the adenocarcinoma type which is consistent with occult lung tumor. At autopsy, the body did not display evidence of blunt or sharp force injury to suggest foul play. The toxicology screen is negative. 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 Hasan, Mahmud, Rashid		Civilian	(b)(6)

ORGANIZATION Organisation	NATION (e.g. United States) Pays	DATE OF BIRTH Date de naissance	SEX Sexe
	Iraq	(b)(6) 1967	[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) Islam
[ ]	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 [1]	Metastatic carcinoma	
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	SIGNATURE (b)(6) DATE Date 5 August 2008	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) 2008 1605	Camp Cropper 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 médican 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 10/24/2008	SIGNATURE (b)(6)

[1] State disease, injury or complication which caused death, but not mode of dying such as heart failure, ect.
[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 3565, 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	DATE	SIGNATURE
(b)(6)		

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*