



**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.<sup>1</sup> 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.<sup>2</sup>

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.

HEPATOBIILIARY 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 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).<sup>3</sup> 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) <b>BTB Mosleh, Mohammed, Mazeon</b>		GRADE Grade  	BRANCH OF SERVICE Arme <b>Civilian</b>
ORGANIZATION Organisation  		NATION (e.g. United States) Pays  	SOCIAL SECURITY NUMBER Numéro de l'Assurance Social <b>(b)(6)</b>
		DATE OF BIRTH Date de naissance  	<input checked="" type="checkbox"/> MALE  <input type="checkbox"/> FEMALE
RACE Race		MARITAL STATUS État Civil	
<input checked="" type="checkbox"/> CAUCASOID Caucasique		SINGLE Célibataire	DIVORCED Divorcé
		MARRIED Marié	SEPARATED Séparé
		WIDOWED Veuf	
RELIGION Culte		OTHER (Specify) Autre (Spécifier)	
PROTESTANT Protestant		<input checked="" type="checkbox"/>	
CATHOLIC Catholique			
JEWISH Juif			
NAME OF NEXT OF KIN Nom du plus proche parent		RELATIONSHIP TO DECEASED Parenté du décédé avec le sus	
STREET ADDRESS Domicile à (Rue)		CITY OR TOWN OR STATE (Include ZIP Code) Ville (Code postal compris)	
MEDICAL STATEMENT Déclaration médicale			
CAUSE OF DEATH (Enter only one cause per line) Cause du décès (N'indiquer qu'une cause par ligne)			INTERVAL BETWEEN ONSET AND DEATH Intervalle entre l'attaque et le décès
DISEASE OR CONDITION DIRECTLY LEADING TO DEATH <sup>1</sup> Maladie ou condition directement responsable de la mort			<b>Biventricular Dilatation (Dilated Cardiomyopathy)</b>
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 <sup>2</sup> Autres conditions significatives			
MODE OF DEATH Condition de décès	AUTOPSY PERFORMED Autopsie effectuée <input checked="" type="checkbox"/> YES - Oui <input type="checkbox"/> NO - Non	CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures	
<input checked="" type="checkbox"/> NATURAL Mort naturelle	MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie		
ACCIDENT Mort accidentelle			
SUICIDE Suicide	NAME OF PATHOLOGIST Nom du pathologiste <b>(b)(6)</b>		
HOMICIDE Homicide	<b>(b)(6)</b>	DATE Date <b>31 May 2008</b>	AVIATION ACCIDENT Accident à Avion <input type="checkbox"/> YES - Oui <input checked="" type="checkbox"/> NO - Non
DATE OF DEATH (day, month, year) Date de décès (le jour, le mois, l'année)	PLACE OF DEATH Lieu de décès		
<b>(b)(6)</b> 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 défunt je conclus que le décès est survenu à l'heure indiquée et à la suite des causes énumérées ci-dessus.			
NAME OF MEDICAL OFFICER Nom du médecin militaire ou du médecin sanitaire <b>(b)(6)</b>		TITLE OR DEGREE Titre ou diplôme <b>Medical Examiner</b>	
GRADE Grade <b>(b)(6)</b>	INSTALLATION OR ADDRESS Installation ou adresse <b>Dover AFB, Dover DE</b>		
DATE Date <b>8/22/2008</b>	<b>(b)(6)</b>		
<small>1 State disease, injury or complication which caused death 2 State conditions contributory to the death, but not related Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort, mais non la maladie ou à la condition qui a provoqué la mort 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</small>			

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

MEDCOM 1038