

### ARMED FORCES INSTITUTE OF PATHOLOGY Office of the Armed Forces Medical Examiner

1413 Research Blvd., Bldg. 102 Rockville, MD 20850 301-319-0000



### \*\*AMENDED\*\* AUTOPSY EXAMINATION REPORT

Name: BTB Mohamed-A	i, Monhad, Ganim	Autopsy No.: (b)(6)
IFN.: (b)(6)		AFIP No.: (b)(6)
Date of Birth: BTE(b)(6)	1987	Rank: CIV
Date of Death: (b)(6)	2005	Place of Death: Iraq
Date of Autopsy: 19 Octo	Place of Autopsy: Port Mortuar	
Date of Report: 20 Octobe	Dover AFB, DE	

Circumstances of Death: According to reports, this 18 year-old civilian detainee was captured by US Forces on 15 Sep 2005. During his detention he was diagnosed with an inner ear infection. Despite treatment the infection progressed to mastoiditis and brain abscess. It was determined that there was no chance of meaningful functional recovery and life support was discontinued after ethics committee review.

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

Identification: Presumptive, based on attached mortuary tag.

CAUSE OF DEATH: Intracranial Abscess

MANNER OF DEATH: Natural

20 October 2006

This amended report is submitted to reflect the results of the Neuropathology Consultation. The opinion is amended accordingly. The remainder of the report remains unchanged.

(b)(6)		(b)(6)			
// \ / (0)		(b)(6)			
(b)(6)	Medical Examiner	(b)(6)	Medical Examiner		

#### FINAL AUTOPSY DIAGNOSES

- Central Nervous System:
  - Right-sided mastoiditis with adjacent temporal lobe abscess and focal subdural empyema
    - 1. Meningitis
  - B. Cerebral edema
  - Neuropathology consultation pending
- II. Pulmonary System:
  - A. Bilateral pulmonary congestion and edema (Right 800-grams; Left 640-grams)
- III. Gastrointestinal System:
  - A. Hemorrhagic Gastritis
- IV. Skin:
  - A. Superficial healing ulceration and fissures of the mouth
  - B. Superficial sacral decubitus ulcer (¾ inch)
  - C. Red macular-papular rash on the upper chest
- V. Evidence of Minor Injury:
  - Scattered abrasions and contusions of the lower torso and lower extremities
- VI. Toxicology (AFIP):
  - A. CARBON MONOXIDE: The carboxyhemoglobin saturation in the blood is less than 1%.
  - B. CYANIDE: There is no cyanide detected in the blood.
  - C. VOLATILES: No ethanol is detected in the bile and vitreous fluid.
  - D. DRUGS: No screened drugs of abuse or medications are detected in the liver.

#### EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished appearing, muscular, 66-inch tall, 129-pound male whose appearance is consistent with the reported age of 18 years. Lividity is present and fixed on the posterior surfaces of the body except in areas exposed to pressure. Rigor has passed. The body is cool to the touch.

The scalp is covered with medium length brown curly hair that has been shaved on the right side. The irides are brown, and the pupils are round and equal in diameter. The external auditory canals are free of any secretions. The ears are unremarkable. The nares are patent and the lips are red and have superficial ulceration and fissures. The nose and maxillae are palpably stable. The natural teeth appear in good condition.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. There is a red maculopapular rash on the center of the chest. The abdomen is flat. The genitalia are those of a normal adult male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The buttocks and anus are unremarkable. There is a 3/4-inch superficial ulcer on the skin overlying the sacrum.

The upper and lower extremities are symmetric and without clubbing or edema. A hospital tag is present on the left ankle. There is a 1-inch callus on the skin covering the left lateral malleolus.

#### CLOTHING AND PERSONAL EFFECTS

The body is received unclad draped in a white sheet.

#### MEDICAL INTERVENTION

- · Intravenous puncture site in the right wrist
- Intravenous puncture in the right antecubital fossa with surrounding subcutaneous hemorrhage
- Intravenous puncture site below the left clavicle
- I ¼-inch stapled incision on the right temporal scalp with underlying burr hole
- 1 ¾-inch stapled incision on the right parietal scalp with underlying burr hole
- 1/8-inch sutured surgical incision on the right parietal scalp
- · Scalp hair shaved on the right side of the head

#### RADIOGRAPHS

A complete set of postmortem radiographs shows no evidence of skeletal injury.

#### EVIDENCE OF INJURY

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

#### Head and neck:

Abrasion of the right side of the nasal bridge, ¼ x 1/8-inch.

#### Torso:

- Contusion over the left iliac crest, 1 ½-inches
- Contusion over the right iliac crest, 2-inches
- Abrasion on the anterior left shoulder, 1/8-inch

#### Extremities:

- Abrasion on the distal anterior right thigh, ½-inch
- Abrasion on the anterior right knee, 1/8-inch
- Abrasion on the proximal anterior right leg, ½-inch
- · Abrasion on the anterior distal right leg, I-inch
- · Abrasion on the anterior right ankle, 1/4-inch
- Abrasion on the posterior distal right leg, 1 x ¼-inch
- Abrasion on the posterior distal right leg, ¼-inch
- Abrasion on the posterior right ankle, ¾ x ¼-inch
- Contusion on the distal anterior left thigh, ¼-inch
- Abrasion on the left knee, ¼-inch
- Abrasion on the anterior left ankle, 1 x ¾-inch
- Abrasion on the distal posterior left leg, 1/8-inch
- Abrasion on the distal posterior left leg, ½ x 1/8-inch
- Abrasion on the posterior left ankle, ¾ x ¼-inch

#### INTERNAL EXAMINATION

#### HEAD:

(See above "Medical Intervention")

The galeal and subgaleal soft tissues of the scalp are free of injury. The dura mater beneath the skull is intact except in the areas associated with therapeutic intervention. The cerebrospinal fluid is viscous and yellow. The 1840-gram brain is edematous with diffuse widening and flattening of gyri and narrowing of the sulci. There is a soft fluctuant mass in the right temporal lobe that on sectioning is identified as a 1 ¼-inch cavity filled with a purulent fluid. A thick coat of purulent exudate covers the base of the brain. There are no traumatic skull fractures. The inner ear is unroofed and the cut surface is soft, pale and friable (histologic sections are prepared). The atlanto-occipital joint is stable. The brain is submitted for neuropathology consultation after formalin fixation.

#### NECK:

The anterior neck is examined utilizing a separate anterior neck dissection. The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage. The thyroid cartilage and hyoid are intact. The larynx is lined by intact white mucosa. The thyroid is symmetric and

red-brown, without cystic or nodular change. There is patchy erosion of the lateral left edge of the tongue.

#### BODY CAVITIES:

The ribs, sternum, and vertebral bodies are visibly and palpably intact. There is 50-milliliters of serous fluid in the pleural cavities. There is 200-milliliters of serous fluid in the peritoneum. The pericardial sac contains an 85-milliter serous effusion. The internal organs occupy their usual anatomic positions.

#### RESPIRATORY SYSTEM:

The right and left lungs weigh 800-grams and 640-grams, respectively. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present.

#### CARDIOVASCULAR SYSTEM:

The 390-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. The coronary arteries are widely patent. The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left and right ventricles are unremarkable. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

#### LIVER & BILIARY SYSTEM:

The 2200-gram liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains a minute amount of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

#### SPLEEN:

The 260-gram spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

#### PANCREAS:

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

#### ADRENALS:

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

#### GENITOURINARY SYSTEM:

The right and left kidneys weigh 200-grams and 190-grams, respectively. The external surfaces are intact and smooth. The cut surfaces are red-tan and congested, with uniformly thick cortices and sharp corticomedullary junctions. The pelves are unremarkable and the ureters are normal in course and caliber. White bladder mucosa overlies an intact bladder wall. The bladder contains approximately 60-milliliters of clear yellow urine. The prostate is normal in size, with lobular,

yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

#### GASTROINTESTINAL TRACT:

The esophagus is intact and lined by smooth, grey-white mucosa. The stomach contains approximately 20 cc of brown fluid. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

#### MUSCULOSKELETAL SYTEM:

Muscle development is normal. The skull is described under "Medical Intervention: above. No bone or joint abnormalities are noted.

#### MICROSCOPIC EXAMINATION

Middle Ear - Devitalized bone and bone marrow; acute and chronically inflamed low cuboidal epithelium compatible with the tympanic cavity.

#### NEUROPATHOLOGY CONSULTATION

In summary, this brain demonstrates subacute right temporal lobe abscess, diffuse subacute purulent meningo-cerebro-ventriculitis, a choroid plexitis, subacute hemorrhagic infarcts in the right superior frontal and cingulated gyri, and an acute hemorrhagic right occipital lobe infarct.

(A copy of the complete Neuropathology Consultation, which was prepared by (b)(6)
(b)(6)
Armed Forces Institute of Pathology, Department of Neuropathology and Opthalmic Pathogy, is maintained in the case file maintained by the Office of the Armed Forces Medical Examiner)

#### ADDITIONAL PROCEDURES

- 1. Documentary photographs are taken by OAFME photographers.
- 2. No trace evidence was collected.
- Specimens retained for toxicologic testing and/or DNA identification are: blood, urine, vitreous, bile, CSF, gastric contents, lung, liver, spleen, kidney, muscle and adipose.
- 4. The dissected organs are forwarded with the body.
- Personal effects are released to the appropriate mortuary operations representatives.
- Identifying marks consist of scars on the posterior distal right forearm and anterior left wrist.

#### OPINION

This 18 year-old male civilian detainee died of an intracranial (brain) abscess arising from a presumed inner ear infection with mastoiditis. Autopsy examination showed abscess formation in the right temporal lobe of the brain, deposition of purulent material on the inferior surfaces of the brain and purulent appearing CSF. Further, there was a diffuse subacute purulent meningo-cerebro-ventriculitis, a choroid plexitis, subacute hemorrhagic infarcts in the right superior frontal and cingulated gyri, and an acute hemorrhagic right occipital lobe infarct. The inner ear is unroofed and the cut surface is soft, pale and friable. There was no evidence of significant injury identified. The toxicology screen was negative. The manner of death is natural.

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

					TE OF DEATH décès (D'Out		S				
Nom du décédé (Nom et prénoms)				GRADE Grade		BRANCH Arme Civilia	Arme		SOCIAL SECURITY NUMBER Numéro de l'Assurance Social (b)(6)		
BTB Mohamed-Ali, Monhnd, Ganim  ORGANIZATION Organisation					- Control	_		_			
URG	INIZATION	Organisation		100	NATION (e.g. Units Pays	id States)	Date de r	naissance	SEX S	Sexe	
					Iraq						X MALE
_	PA	CE Race	-1	MARIO	AL STATUS É	tat Civil	1	RELIGION	-	L	
_	1	CE Race	_	MARG	ALSIATUS E	IBI CIVII	_		Cutte	11	OTHER STREET
X	CAUCASOID	Caucasique		SINGLE	Célibataire	Divorce	ED .	Protestant	MODELING		OTHER (Specifier) Autre (Specifier)
	NEGROID	Negriode		MARRIED	Marié.	SEPARA	TED	Catholique		×	
	OTHER (Specific			WIDOWED	Veuf	Séparé		JEWISH	Jul	11	
NAME	OF NEXT OF		s proche parent			RELATIONSHIP	TO DECEASE	D Parenté du	décéde avec	ie sus	
STRE	ET ADDRESS	Domicilà à (Rue)				CITY OR TOWN	OR STATE	(Include ZIP Cod	e Ville (Cod	te posta	al compris)
_				MEDI	CAL STATEMEN	T Déclarat	ion médicale				
				nico.	ONE OTH TEMEN	- Decima	John Hill Care			Ta	OTENNAL DEBAKE
				OF DEATH IU décès (N'	(Enter only one indiquer qu'une cau	CONTRACTOR AND				O In	NTERVAL BETWEE! INSET AND DEATH Intervalle entre attaque et le décès
		ON DIRECTLY LEADING	Control of the Control		Brain Abso	ess				٧	Veeks
ANTECEDENT CAUSES Condition morbide, s'il y a lieu menant à la cause primaire				Ear infection					V	Veeks	
Symptômes UNDERLYING CAUSE, IF ANY, GIVING RISE précurseurs de TO PRIMARY CAUSE la mort. Condition morbide, s'il y a lieu, menent à la cause primaire											
	R SIGNIFICANT										
1000	OF DEATH	AUTOPSY PERF	ORMED A	utopsia effe	ctuée	X YES OU	□ NO	Non DEA	TH DUE TO E		ROUNDING NAL CAUSES
Condition de décès MAJOR FINDINGS OF AUTOPSY Co  X NATURAL Mort naturalie			Condu	sions principales de				onstances de l les extérieures		suscitées par des	
ACCIDENT Mort accidentalis											
SUICIDE (b)(6)			elacoiste								
1	HOMICIDE Homicide	SIGNATURE	Signature			19 October 2005 Yes ou					NO Non
A-10-4	OF DEATH	day, month, year) out, le mois, fannée)		rynancu	F DEATH Lieu de	_					
110	I HAVE V	005 EWED THE REMAINS OF								ABOV	E
)(6		né les restes mortels du de		que le déci	is est survenu à l'he		la suite des ca	uses énumérées d			
my/0		e e a se e comment un un	A THE PARTY OF	an immediate				Examiner			
AME	OF MEDICAL C										
D)(E	OF MEDICAL C		INSTALLATI		20,525	allation ou adresse	Cir.				
0)(6 0)(6 0)(6 0)(6	OF MEDICAL C		THE 18 TO 18	AFB, D	ORESS Instr OVER DE Signature	ellation ou adresse					

DD1 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	LIČENSE NÚMB	LICENSE NUMBER AND STATE			
INSTALLATION OR ADDRESS	DATE	SIGNATURE	SIGNATURE			
NAME OF CEMETERY OR CREMATORY	LOCATION O	F CEMETERY OR CREMATORY	ETERY OR CREMATORY			
TYPE OF DISPOSTION		DATE OF DISPOSTION				
	REGISTRATION OF VITAL S	TATISTICS				
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)	n n n n n			USAPA V1.00		