

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 REPORT

Name: BTB Karim, Ala Shnaywir SSAN: (b)(6)

Date of Birth: (b)(6) 1982 Date of Death (b)(6) 2008

Date/Time of Autopsy: 09 APR 2008 @ 0900

Date of Report: 15 JUL 2008

Autopsy No.: (b)(6)

AFIP No.: (b)(6)

Grade: Civilian, Detainee Place of Death: Iraq

Place of Autopsy: Dover Mortuary

Dover AFB, DE

Circumstances of Death: This 25 year-old detained was being detained in Theater Internment Facility (TIF) Camp Bucca, when as reported, he was observed to be vomiting outside of his tent. When questioned, he complained of being dizzy and vomiting blood. He was brought to the TIF hospital where he was listed in serious condition with a possible aneurysm. He was urgently MEDEVAC'd to the combat support hospital in Balad. While in the air, his condition worsened and the aircraft was diverted to Al Kut. All resuscitative measures were unsuccessful.

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

Identification: Presumptive identification via review of all accompanying paperwork.

Post-mortem fingerprints taken and dental exam performed. Suitable specimen for DNA analysis obtained.

CAUSE OF DEATH: Hemorrhage of the right cerebellum

MANNER OF DEATH: Natural



EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished male. The body is 69 ½ inches in length, weighs 215 pounds, and appears compatible with the stated age of 25 years old. The body is cold. Lividity is fixed on the posterior surface of the body except in the areas exposed to pressure. The head and neck are suffused. Rigor is resolving to an equal degree in all extremities. There is marbling of the skin of both shoulders.

The scalp hair is black. On the back of the head is a 1-inch linear scar. Facial hair consists of a beard. The irides are indistinct. The corneae are cloudy. The conjunctivae are pale with no petechiae. The sclerae are white. The oral cavity, external nares, and external auditory canals are free of foreign material or abnormal secretions. There are no petechiae of the oral mucosa.

The chest is symmetric. The genitalia are those of a circumcised adult male. The anus is atraumatic.

The upper and lower extremities are symmetric and without clubbing or edema. The fingernails are intact. On the lateral right thigh is a 2 x 1-inch scar. A 2 x 1/4-inch scar is on the left knee. On the right knee is a 1 x 1/2-inch healing abrasion.

CLOTHING AND PERSONAL EFFECTS

The body is clad in socks. Accompanying the body are three syringes, two bottles of vecuronium, and a bottle of midazolam (submitted to toxicology).

MEDICAL INTERVENTION

An endotracheal tube is in the oral cavity and trachea. On the anterior torso are multiple EKG lead pads. A catheter is in the urethra and attached to a catch bag that contains 700 milliliters of yellow urine. Intravenous catheters are in the left groin, right wrist, and left antecubital fossa. There are multiple needle puncture marks of both clavicles, right antecubital fossa, and left wrist. There is gauze around the left wrist.

RADIOGRAPHS

A complete set of post-mortem radiographs is obtained and reveal no evidence of trauma.

EVIDENCE OF INJURY

There is no evidence of significant external or internal recent injury.

INTERNAL EXAMINATION

BODY CAVITIES:

The ribs, sternum, and vertebral bodies are visibly and palpably intact. There are 100 milliliters of serosanguineous fluid in both chest cavities. No adhesions are present in any of the body cavities. The organs occupy their usual anatomic positions.

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. The leptomeninges are thin and delicate. There is no epidural or subdural hemorrhage. There is focal subarachnoid hemorrhage of the right cerebellum. The brain weighs 1270 grams and is examined after

fixation. The cerebral hemispheres are symmetrical and the structures at the base of the brain are intact. The gyri and sulci are unremarkable. The surface of the right cerebellum is soft. Coronal sections through the cerebral hemispheres reveal no lesions. Transverse sections through the brain stem and cerebellum reveal a $3.0 \times 3.0 \times 3.0$ centimeter area of hemorrhagic, soft, and friable tissue of the right cerebellum and scattered punctuate hemorrhages of the pons.

The anterior strap muscles of the neck are homogenous and red-brown (by layer-wise dissection). There is hemorrhage around the puncture sites superior to the clavicles. 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. The thyroid is symmetric and dark brown, without cystic or nodular change. Incision and dissection of the posterior neck demonstrates no deep paracervical muscular injury and no cervical spinal column fractures.

RESPIRATORY SYSTEM:

The upper airway is clear of debris and foreign material. The mucosal surfaces are smooth, yellow-tan and unremarkable. The right and left lungs weigh 700 and 700 grams, respectively. The pulmonary parenchyma red-purple exuding moderate amounts of blood. The pulmonary arteries are normally developed and patent without thrombus or embolus.

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. There is tunneling of the proximal left anterior descending coronary artery (0.5 centimeters below the epicardium for 2.0 centimeters). The coronary arteries are widely patent. The myocardium is homogenous. The valve leaflets are thin and mobile. The walls of the left ventricle, interventricular septum, and right ventricle are 0.8, 0.8, and 0.2 centimeters, respectively. The right ventricle is dilated. The aorta and its major branches arise normally and follow the usual course and are unremarkable. The vena cava and its major tributaries return to the heart in the usual distribution and are free of thrombi.

LIVER & BILIARY SYSTEM:

The 2000 gram liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown with the usual lobular architecture with no focal lesions noted. The gallbladder contains 5 milliliters of dark-green bile. There is cholesterolosis of the gall bladder mucosa. The extrahepatic biliary tree is patent.

SPLEEN:

The 350 gram spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon with unremarkable lymphoid follicles.

PANCREAS:

The pancreas is red-tan with a lobulated appearance. No mass lesions or other abnormalities are seen.

ADRENALS:

The right and left adrenal glands are symmetric, with mild autolytic changes. No masses or areas of hemorrhage are identified.

GENITOURINARY SYSTEM:

The right and left kidneys weigh 170 and 160 grams, respectively. The external surfaces are intact and smooth. The cut surfaces are tan-red and the cortex is delineated from the medullary pyramids. The pelves are unremarkable and the ureters are normal in course and caliber. The bladder contains scant urine. The prostate and testes are unremarkable.

GASTROINTESTINAL TRACT:

The esophagus is intact and lined by smooth, grey-white mucosa. The stomach, small bowel, colon, and appendix are unremarkable. The stomach contains 20 milliliters of brown fluid.

MUSCULOSKELETAL:

Muscle development is normal. No bone or joint abnormalities are identified.

MICROSCOPIC EXAMINATION

Cerebellum (Slides 1 and 2): Parenchyma hemorrhage with dilated and tortuous blood vessels. Extensive loss of Purkinje cells and cells of the granular layer. Focal subarachnoid hemorrhage.

Pons (Slide 3): Scattered, hyper-eosiniophilic neurons.

ADDITIONAL PROCEDURES

- Specimens retained for toxicology testing and/or DNA identification are: Blood, vitreous fluid, bile, urine, liver, myocardium, lung, kidney, spleen, psoas muscle, adipose tissue and gastric contents.
- The dissected organs are forwarded with the body. The brain is retained for further examination.
- Selected portions of organs are retained in formalin.
- Personal effects are released with the body.
- Recovered evidence: None.
- Skin incisions of the posterior torso, buttocks and extremities reveal no evidence of trauma.
- Documentary photographs are taken by autopsy is (b)(6) OAFME). (OAFME). Assisting with the

FINAL AUTOPSY REPORT: (b)(6)
BTB Karim, Ala Shnaywir

FINAL AUTOPSY DIAGNOSES

- Hemorrhage of the right cerebellum:
 - A. Parenchyma hemorrhage of the right cerebellum with extensive loss of Purkinje cells
 - B. Focal subarachnoid hemorrhage of the right cerebellum
 - C. Punctate hemorrhages of the pons (consistent with herniation)
- II. Additional natural disease:
 - A. Tunneling of the proximal left anterior descending coronary artery
 - B. Cholesterolosis
- III. Evidence of medical intervention: As describe above
- IV. Identifying marks: As described above
- V. Post-mortem changes: As described above
- VI. Toxicology (AFIP):
 - A. VOLATILES: No ethanol detected in the blood and vitreous fluid
 - B. CARBON MONOXIDE: The carboxyhemoglobin saturation in the blood was 4%¹
 - C. CYANIDE: No cyanide detected in the blood
 - D. DRUGS: The following drugs were detected
 - 1. Lidocaine (urine)
 - 2. Promethazine (urine; none detected in the blood)
 - Pseudoephedrine (urine; none detected in the blood)
 - 4. Midazolam (urine; none detected in the blood)
 - Acetaminophen (urine)
 - Vecuronium (0.73 mg/L in the blood) and its metabolite 3-Desacetylvecuronium (blood)

OPINION

This 25 year-old detaines (b)(6) died of a hemorrhage of the right cerebellum. The toxicology was positive for medications used in resuscitation (lidocaine, midazolam, and vecuronium), anti-nausea medication (promethazine) and over-the-counter medications (pseudoephedrine and acetaminophen). The manner of death is

(b)(6)	ral.	•
(b)(6)	Medical Examiner	

Carboxyhemoglobin saturations of 0-3% are expected for non-smokers and 3-10% for smokers.

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AUTOPSY EXAMINATION REPORT

Name: BTB Razzaq Abd-Al, Luay Mustafa

TMEP: (b)(6)

Date of Birth (b)(6) 1986 Date of Deat (b)(6) 2008

Date/Time of Autopsy: 09 Apr 2008

From 1000 to 1200 hours Date of Report: 02 May 2008 Autopsy No.: (b)(6) AFIP No.: (b)(6)

Rank: Civilian detainee Place of Death: Iraq

Place of Autopsy: Port Mortuary

DAFB, Dover, DE

Circumstances of Death: This civilian detainee was reportedly found hanging in his cell by his pants that he made into a noose. During the course of his interment, he admitted traveling from Syria to become a suicide bomber. Further, he displayed many erratic behaviors and signs of a possible mental impairment. Prior to his death, he was placed on a 24-hour watch due to a possible threat of self-harm. The watch consisted of checks every 15 minutes and his confinement was solitary. The detainee was found deceased in his cell by a member of the US Guard Forces.

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

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

CAUSE OF DEATH: Hanging

MANNER OF DEATH: Suicide

EXTERNAL EXAMINATION

The body is that of a nude well-developed, well-nourished male. The body weighs 172 pounds, is 68 inches in length and appears compatible with the reported age of 26 years. The body is cold. Rigor is passing. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure. Marbling of the skin of the left lower extremity and left forearm is seen. There is a slight green discoloration of the skin of the right lower quadrant of the abdomen. The normocephalic head is congested, and the scalp hair is brown, short and curly. Facial hair consists of a stubble beard. The irides are brown. The corneae are cloudy. The conjunctivae are congested with numerous petechiae seen bilaterally. Numerous petechiae are seen on the skin of the upper and lower eyelids. 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 are without evident injury. The teeth are natural and the left upper central incisor is missing. The neck is described in the Evidence of Injury section below. The chest is unremarkable. No evidence of injury of the ribs or the sternum is evident externally. The abdomen is unremarkable. The external genitalia are those of an adult circumcised male. The posterior torso and anus are without note. The fingernails are intact. (b)(6) A Dover tag (b)(6) (b)(6)is attached to the left ankle. tattoo (b)(6) Two name tags are attached to the left hand. A hospital ID bracelet is attached to the right wrist and is inscribed with the numbers, (b)(6)

CLOTHING AND PERSONAL EFFECTS

None

MEDICAL INTERVENTION

- Endotracheal intubation
- Triple lumen catheter of the right subclavian vein
- Two automatic defibrillator pads on the right and left sides of the chest
- One needle puncture in the right antecubital fossa and two needle punctures in the left antecubital fossa
- Pulse oximeter on the second digit of the left hand

RADIOGRAPHS

The findings demonstrated:

- Healed fracture of the left clavicle
- Heavy lung congestion bilaterally

EVIDENCE OF INJURY

There is a 9 inch brown discontinuous ligature furrow of the skin of the front and left side of the neck. The furrow extends to the left side of the back of the neck and is directed obliquely upwards at an approximate 20 degree angle. The ligature furrow crosses above the thyroid cartilage 9 inches below the top of the head and extends superiorly to the left side of the neck, passing 3-1/4 inches below the left external auditory meatus and 8-1/2 inches below the top of the head. The highest point of the furrow is on the left side of the back of the neck located 7 inches below the top of the head and 1 inch to the left of the posterior midline. The furrow only extends 1 inch to the right of the anterior midline. The width of the furrow is 1/4 inch. The depth of the furrow is 1/8 inch. The skin within the furrow is dried and abraded. An anterior neck dissection shows no injury to the underlying soft tissues or hemorrhage into the strap muscles. The hyoid bone and thyroid cartilage are intact.

There is a 1 inch contusion of the posterior/distal aspect of the right leg.

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 1-1/2 inches thick.

HEAD AND CENTRAL NERVOUS SYSTEM:

The brain is retained for examination after formalin fixation. The scalp is reflected. The galeal and subgaleal soft tissues of the scalp are free of injury. There are no skull fractures. The calvarium of the skull is removed. The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage present. The leptomeninges are thin and delicate. There is a 1-3/4 x 1 inch remote contusion of the left frontal lobe of the brain and a 2 x 1/4 inch remote contusion of the right frontal lobe of the brain. Clear cerebrospinal fluid surrounds the 1250 gram brain, which has unremarkable gyri and sulci. Coronal sections through the cerebral hemispheres reveal no non-traumatic lesions. Transverse sections through the brain stem and cerebellum are unremarkable. The atlanto-occipital joint is stable. The upper cervical spinal cord is unremarkable.

NECK:

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

AUTOPSY REPORT (b)(6)
BTB Razzaq Abd-Al, Luay Mustafa

CARDIOVASCULAR SYSTEM:

The 300 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 wide patency. 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 1.0, 1.2 and 0.4 cm thick, respectively. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

RESPIRATORY SYSTEM:

The upper airway is clear of debris and foreign material; the mucosal surfaces are smooth, yellowtan and unremarkable. The pleural surfaces are smooth, glistening and unremarkable bilaterally. The pulmonary parenchyma is diffusely congested and edematous, 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 640 grams; the left 530 grams.

HEPATOBILIARY SYSTEM:

The 1630 gram liver has an intact smooth capsule covering dark red-brown, moderately congested tan-brown parenchyma with no focal lesions noted. The gallbladder is empty; 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 5 ml of brown 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 120 grams; the left 120 grams. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, red-brown cortical surface. The cortex is sharply delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelves and ureters are unremarkable. White bladder mucosa overlies an intact bladder wall. The bladder contains approximately 3 ml of turbid yellow urine. The testes, prostate gland and seminal vesicles are without note.

LYMPHORETICULAR SYSTEM:

The 210 gram spleen has a smooth, intact capsule covering red-purple, moderately firm parenchyma; the lymphoid follicles are unremarkable. Lymph nodes in the hilar, periaortic and iliac regions are not enlarged.

ENDOCRINE SYSTEM:

The pituitary gland 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 medulae. No masses or areas of hemorrhage are identified.

MUSCULOSKELETAL SYSTEM:

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

ADDITIONAL PROCEDURES

- Documentary photographs are taken by OAFME staff photographer (b)(6)
 OAFME staff autopsy assistant, assisted with the autopsy.
- Specimens retained for toxicology testing and/or DNA identification are: brain, heart, lung, liver, spleen, kidney, skeletal muscle, adipose tissue, blood, urine, gastric contents, and vitreous fluid.
- The dissected organs are forwarded with body.

MICROSCOPIC EXAMINATION

Brain (Slides 1 and 2) - Disrupted cortex with white matter gliosis

AUTOPSY REPORT (b)(6)
BTB Razzaq Abd-Al, Luay Mustafa

FINAL AUTOPSY DIAGNOSES:

- Hanging: Discontinuous ligature furrow of the front and left side of the neck
- II. Minor Injuries: Contusion of the right leg
- III. Remote Injuries: Remote contusions of the left and right frontal lobes of the brain and a healed fracture of the left clavicle
- IV. Natural Disease: None
- V. Medical Therapy: As described above
- VI. Postmortem Changes: As described above
- VII. Identifying Marks: As described above
- VIII. Toxicology (AFIP):
 - A. VOLATILES: No ethanol is detected in the blood and vitreous fluid
 - B. DRUGS: No screened drugs of abuse or medications (including mefloquine) are detected in the blood
 - C. CYANIDE: There is no cyanide detected in the blood
 - D. CARBON MONOXIDE: The carboxyhemoglobin saturation in the blood is less than 1%

OPINION

This male civilian detainee, BTB	(b)(6)	died of hanging. He was found
hanging in a cell by his pants that	t he made into a noose. He wa	is the only occupant of the cell. The toxicology screen is negative. The
(b)(6)		
(b)(6) MEDICAL EXAMINE	CD.	

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AUTOPSY EXAMINATION REPORT

Name: Al-Saaida, Muhammed A.

Detainee Number: (b)(6)

Date of Birth: (b)(6) 1965 Date of Death (b)(6) 2009

Date/Time of Autopsy: 29 Jul 2009 @ 0900

Date of Report: 21 Sep 2009

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

Rank: Detainee Place of Death: Iraq

Place of Autopsy: Port Mortuary,

Dover Air Force Base, DE

Circumstances of Death: This 44 year-old detainee was being held in custody in Iraq. By report, he was witnessed to collapse by several other detainees at approximately 1600 on (b)(6) 2009. Resuscitation was initiated and he was transferred to the nearest medical facility. All resuscitative efforts were unsuccessful.

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

Identification: Positive identification by ante-mortem and post-mortem fingerprint comparison.

CAUSE OF DEATH: Atherosclerotic cardiovascular disease

MANNER OF DEATH: Natural

EXTERNAL EXAMINATION

		bag. Attached to the outermost bag are two paper tags
with the na		The body is unclad. Paper bags are present on
the hands.	A paper tag is attached to the laft	great toe labeled with the name (b)(6)
(b)(6)	A white tag labeled (D)(O)	is placed on the left ankle at intake by mortuary
affairs		

The body is that of a well-developed, well-nourished male. The body weighs 170-pounds and measures 67-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. There is mild marbling of the upper and lower extremities.

Injuries to the head and neck are described below in "Evidence of Injury." The head is normocephalic, and the scalp hair is black-gray and short. Facial hair consists of a black-gray beard and moustache. The irides appear brown in color. The comeas are cloudy. The conjunctivae are congested. The sclerae are congested. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The earlobes are not pierced. The nasal skeleton and maxilla are palpably intact. The lips are without evident injury. The teeth are natural and in good condition. The neck is straight, and the trachea is midline and mobile.

The chest is symmetric with no external evidence of injury to the ribs or sternum. The posterior torso demonstrates no evidence of trauma. The abdomen is flat with no healed surgical scars present. The genitalia are those of a circumcised adult male. Pubic hair is present in a normal distribution. The anus is non-traumatic. The testes are descended with no palpable masses present.

Injuries to the extremities are described in "Evidence of Injury." The upper and lower extremities are symmetric and without clubbing, edema, fractures, lacerations or deformities. The fingernails are intact and trimmed. The toenails are dystrophic.

Well-healed irregular scars are present on both lower extremities. There are three scars on the medial right thigh, each measuring $\frac{1}{2} \times \frac{1}{2}$ -inches. There is a 12 x 1-inch irregular scar on the lateral left thigh. There is a 3 x 1-inch irregular scar and a $\frac{1}{2} \times \frac{1}{2}$ -inch scar on the anterior left thigh. There is a 3 x 1-inch scar on the popliteal fossa of the right knee. There are numerous radio-opaque foreign bodies identified on radiography in both lower extremities that are too small to be recovered.

CLOTHING AND PERSONAL EFFECTS

The following clothing items are received with the body at the time of autopsy:

- Yellow shirt (torn)
- Yellow sweatpants
- White boxer shorts

MEDICAL INTERVENTION

- EKG leads on anterior torso (6)
- Defibrillator pads on left upper torso and left upper back
- · Intravascular catheters in the right and left antecubital fossae
- Anterior right rib fractures of 4-5th ribs
- · Anterior left rib fracture of 4th rib

RADIOGRAPHS

A complete set of postmortem radiographs is obtained and show no evidence of acute injury.

AUTOPSY REPORT: (b)(6)
Al-Saaida, Muhammed A.

EVIDENCE OF INJURY

Minor injuries:

A ½ x ¼-inch superficial abrasion is on the anterior surface of the scalp. A ½ x ¼-inch abrasion is on the dorsal surface of the left hand.

INTERNAL EXAMINATION

BODY CAVITIES:

See "Medical Intervention." No excess fluid is in the pleural, pericardial, or peritoneal cavities. The organs occupy their usual anatomic positions. The subcutaneous fat layer of the abdominal wall is unremarkable.

HEAD (CENTRAL NERVOUS SYSTEM) and NECK:

See "Evidence of Injury." The galeal and subgaleal soft tissues of the scalp are free of injury. There are no skull fractures. The dura mater is intact with no evidence of hemorrhage. The leptomeninges are thin and delicate. Clear cerebrospinal fluid surrounds the 1383-gram brain, which has unremarkable gyri and sulci. The brain was retained and fixed for Neuropathology consultation (see Appendix A: Neuropathology Consultation). The atlanto-occipital joint is stable. The upper spinal cord is unremarkable.

The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage. The thyroid cartilage and hyoid bone are intact. The larynx is lined by intact white mucosa. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The 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.

RESPIRATORY SYSTEM:

The airways are clear of debris and foreign material and the mucosal surfaces are smooth, yellow-tan, and unremarkable. The right and left lungs weigh 680-grams each. 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. The pulmonary arteries are normally developed and patent. The diaphragm is intact.

CARDIOVASCULAR SYSTEM:

The 480-gram heart is contained in an intact pericardial sac. The epicardial surface is smooth, with moderate fat investment. The coronary arteries are present in a normal distribution, with a left-dominant pattern. The proximal left anterior descending coronary artery has greater than 90% atherosclerotic narrowing. The mid left anterior descending coronary artery has a tunnel measuring 0.3-centimeters in depth and 1.5-centimeters in length. The circumflex artery has 50% atherosclerotic narrowing. The right coronary artery has 10% atherosclerotic narrowing. Cross-sections through the myocardium show a 3-centimeter pale area of the posterior left ventricle and posterior ventricular septum. The valve leaflets are thin and mobile. The walls of the left ventricle, interventricular septum, and right ventricle are 1.3, 1.5, and 0.3-centimeters thick, respectively. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels with mild atherosclerotic plaque. The renal, mesenteric, and iliac vessels as well as the venae cavae are unremarkable.

AUTOPSY REPORT: (b)(6)
Al-Saaida, Muhammed A.

HEPATOBILIARY SYSTEM:

The 1700-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 10-milliliters of green-black bile and no stones. The mucosal surface is green and velvety.

LYMPHORETICULAR SYSTEM:

The 160-gram spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested. Lymph nodes in the hilar, periaortic, and iliac regions are unremarkable.

ENDOCRINE SYSTEM:

The pituitary gland is unremarkable. The thyroid gland has been described (see <u>NECK</u>, above). The right and left adrenal glands are symmetric, with bright yellow cortices and red-brown medullae. No masses or areas of hemorrhage are identified.

GENITOURINARY SYSTEM:

The right and left kidneys weigh 160-grams each. 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 8-milliliters 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, gray-white mucosa. The stomach contains approximately 375-milliliters of tan fluid and partially digested food particles. The gastric wall is intact. The duodenum, loops of small bowel and colon are unremarkable. The pancreas is autolyzed with no mass lesions or other abnormalities seen. The appendix is present.

MUSCULOSKELETAL SYSTEM:

No non-traumatic abnormalities of the muscles or bones of the appendicular and axial skeletons are identified. Dissection of the skin of the back, upper and lower extremities show no evidence of deep tissue hemorrhage. Dissection of the skin of the ankles and wrists show no evidence of hemorrhage.

MICROSCOPIC EXAMINATION

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

- The liver shows congestion and no significant periportal inflammation or portal fibrosis. There
 is mild steatosis.
- The kidney shows autolysis of the proximal tubules with relative sparing of the glomeruli, distal tubules, and collecting system. There is occasional glomerulosclerosis, mild-moderate hyaline arteriolosclerosis, and scattered patchy chronic inflammation.
- The spleen shows congested parenchyma with normal lymphoid follicle formation and autolytic change.

Al-Saaida, Muhammed A.

- The lung shows atelectasis with multifocal congestion with no significant intra-alveolar or interstitial inflammation.
- The thyroid shows normal follicles with no increased inflammation or fibrosis.
- The myocardium shows properly arranged myocytes that are with mild enlargement ("boxcar" nuclei). There is no significant increase in fibrosis or inflammation
- The proximal left anterior descending coronary artery shows greater than 90% atherosclerotic narrowing.
- The mid left anterior descending coronary artery shows tunneling of the artery into the myocardium
- The posterior wall of the left ventricle shows extensive fibrosis with no significant acute or chronic inflammation

Slide key:

Slide 1: Thyroid, liver

Slide 2: Spleen, kidney

Slide 3: Right lung

Slide 4: Left lung

Slide 5: Proximal left anterior descending coronary artery

Slide 6: Mid left anterior descending coronary artery with tunneling

Slide 7: Posterior left ventricle

ADDITIONAL PROCEDURES AND REMARKS

- Documentary photographs are taken by (b)(6) (AFMES staff photographer). Assisting with the autopsy is (b)(6) (AFMES staff).
- 2. Personal effects are released to the appropriate mortuary operations representatives.
- Specimens retained for toxicology testing and/or DNA identification are: vitreous fluid, blood, urine, bile, gastric contents, lung, liver, spleen, kidney, psoas muscle, adipose tissue, and myocardium.
- 4. The dissected organs are forwarded with body.
- No evidence is recovered.

FINAL AUTOPSY DIAGNOSES

1. Minor abrasions:

- Superficial abrasion on anterior surface of the scalp
- b. Superficial abrasion on dorsal surface of the left hand

II. Natural disease:

- Severe coronary atherosclerosis
 - Greater than 90% atherosclerotic narrowing of the proximal left anterior descending coronary artery
 - ii. 50% atherosclerotic narrowing of the circumflex artery
 - iii. 10% atherosclerotic narrowing of the right coronary artery
 - Remote infarction of the posterior left ventricle and posterior ventricular septum
- Tunneling of the mid left anterior descending coronary artery

III. Medical therapy:

- a. EKG leads (6)
- b. Defibrillator pads (2)
- c. Intravascular catheters in right and left antecubital fossae
- d. Fractures of anterior right 4-5th ribs and anterior left 4th rib, consistent with cardiopulmonary resuscitation

IV. Post-mortem changes:

- Rigor is present and equal in all extremities
- b. Lividity is posterior and fixed except in areas exposed to pressure
- The body temperature is cold
- d. Changes of decomposition including marbling of the upper and lower extremities

V. Identifying marks:

 Scars: multiple scars on both lower extremities with associated retained radio-opaque foreign bodies identified radiographically

VI. Toxicology:

- a. Volatiles: No ethanol is detected in the blood
- b. Drugs: No screened medications or drugs of abuse are detected in the blood
- c. Carbon Monoxide1: carboxyhemoglobin saturation in the blood was less than 1%
- d. Cyanide: No cyanide is detected in the blood

Carboxyhemoglobin saturations of 0-3% are expected for non-smokers and 3-10% for smokers.

AUTOPSY REPORT:	(b)(6)	
Al-Saaida, Muhammed	A.	

This detainee, (b)(6) died as a result of atherosclerotic cardiovascular disease. He had greater than 90% atherosclerotic narrowing of the proximal left anterior descending coronary artery, 50% atherosclerotic narrowing of the circumflex artery, and 10% atherosclerotic narrowing of the right coronary artery. There was fibrosis of the posterior wall of the left ventricle and posterior ventricular septum indicating a healed infarction. The histologic changes in the kidney are consistent with hypertension. The toxicology screen is negative for ethanol, carbon monoxide, cyanide, drugs of abuse, and screened medications. The manner of death is natural.

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

AUTOPSY REPORT: (b)(6)
Al-Saaida, Muhammed A.

Appendix A: Neuropathology Consultation

GROSS DESCRIPTION:

Brain weight: 1383 mg

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

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

Due to early autolysis, the external features of the brain are slightly discolored red-brown and the cut surfaces are discolored gray. The brain is well fixed.

The leptomeninges are thin, delicate and transparent. The cerebral gyri have an anatomically normal size, configuration and consistency. The perisellar, perimesencephalic and cerebellomedullary cisterns have a normal configuration and size.

There is no sign of herniation or midline shirt. Moderately deep tentorial grooves indent each uncus approximately 0.4 cm from the medial margins. The cerebellar tonsils have a normal 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 show moderately severe atherosclerosis. There are no aneurismal dilatations or sites of occlusion. The identifiable cranial nerve roots are not remarkable.

Coronal sections of the cerebrum reveal no focal or diffuse abnormalities in the cortex, white matter or deep nuclear structures. Due to autolysis, the septum pellucidum is almost completely dissolved. 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. Except as noted, the ventricular system has an anatomically normal size and configuration. The aqueduct of Sylvius and the foramina of Luschka and Magendie are patent. 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) left frontal lobe, (2) anterior corpus callosum/cingulate gyri/septum pellucidum, (3) left insula/claustrum/external capsule/putamen/globus pallidus/internal capsule, (4) right thalamus/posterior limb of internal capsule, (5) left hippocampus, (6) left occipital lobe/occipital horn of lateral ventricle, (7) right cerebellum, (8) left pons/medulla/cerebellum (cerebellomedullary cistern), (9) dura.

Sections from each block are stained with H&E, LFB, Bielschowsky and iron (Prussian Blue) techniques and immunostained for β-amyloid precursor protein (β-APP).

MICROSCOPIC FINDINGS:

The microscopic sections show mild/moderate autolysis of the ependymal surfaces and septum pellucidum.

9

In the section of cerebellomedullary cistern that includes midline cerebellum and floor of the fourth ventricle there are small foci of acute subarachnoid hemorrhage in the cerebellar folia that are consistent with agonal ischemia. There is no associated vascular anomaly or tumor. In scattered areas of the cerebral cortex and basal ganglia there are individual moderaltely eosinophilic neurons suggestive of early ischemic neuronal injury.

DIAGNOSIS:

Brain, autopsy:

- 1. Early ischemic neuronal injury
- 2. Mild postmortem autolysis

(b)(6)

NEUROPATHOLOGIST 15 Sep 2009

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

1413 Research Blvd., Bldg. 102 Rockville, MD 20850 1-301-319-0000



AUTOPSY EXAMINATION REPORT

Name: Fallah (Ismail), Mahmud Al Juburi	Autopsy No.: (b)(6)	
Approx Age: 30-year		Autopsy No.: (b)(6) AFIP No.: (b)(6)	
Date of Death (b)(6)	2009	Rank: Detainee	

Date/Time of Autopsy: 11 JUL 2009/1300 Place of Death: Iraq

Date of Report: 07 OCT 2009 Place of Autopsy: BIAP Mortuary

BIAP, Iraq

Circumstances of Death: This young adult male $^{(b)(6)}$ was placed in flex cuffs while being taken into custody by assault forces in Iraq. Investigative reports indicate that $^{(b)(6)}$ broke loose from his restraints and attempted to gain control of an assault force member's weapon. $^{(b)(6)}$ received small arms fire from other members of the assault force.

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

Identification: Presumptive identification by accompanying reports, identification tags and documentation. Postmortem fingerprint examination and postmortem DNA samples are taken for profile purposes should exemplars becomes available for positive identification.

CAUSE OF DEATH: Multiple Gunshot Wounds

MANNER OF DEATH: Homicide

EXTERNAL EXAMINATION

Injuries will be described in detail in a separate section, and will only be briefly alluded to in the remainder of the report, for purposes of orientation and completeness. The body is that of a well-developed, well-nourished appearing, young adult male detainee of undetermined age (approximately 30-years old). The body is received clad in a blood and body fluid soaked tan tunic, white sleeveless undershirt, and white boxer shorts. The remains are 70-inches in length, and weigh approximately 123-pounds. Lividity is present and fixed on the posterior surface of the body except in areas exposed pressure. Rigor is present to an equal degree in all extremities. The temperature of the body is that of the refrigeration unit.

The head is normocephalic, and the scalp is covered with wavy black hair, in a normal distribution and measuring up to 2-inches in greatest length. There is a trim black mustache and the remainder of the face is clean shaven. The irides are brown. The corneae are clear. The conjunctivae are pale. The pupils are round and equal in diameter. The sclerae are white and without petechial hemorrhage. The external nares and oral cavity are free of foreign material and abnormal secretions. The earlobes are unremarkable. The nares are patent and the lips are atraumatic. The nasal skeleton and maxillae are palpably intact. The teeth appear natural and in good condition. The neck is straight, and the trachea is midline and mobile.

The chest is symmetric. The abdomen is flat. The genitalia are those of a normal adult circumcised male. The testes are descended and free of masses. Body hair is present in a normal male distribution. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric and without clubbing, edema, or nontraumatic abnormalities. The fingernails are intact and the nail beds are cyanotic.

No tattoos or surgical scars are noted.

CLOTHING AND PERSONAL EFFECTS

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

- White boxer shorts
- Tan tunic
- White sleeveless undershirt

MEDICAL INTERVENTION

No evidence of medical intervention is in place at the time of autopsy.

RADIOGRAPHS

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

- No retained bullet fragments in the head and chest
- Multiple non-depressed skull fractures and anterior pneumocephalus
- Transverse and oblique fractures of the right temporal and bilateral frontal bones
- Transverse frontoethmoidal fracture with fractures of the frontal and ethmoid sinuses and cribriform plate
- Bilateral asymmetric lung consolidation, right greater than left
- Pneumomediastinum and pneumopericardium
- No fractures/dislocations of the spine or extremities
- Soft tissue calcification in the medial left proximal thigh

EVIDENCE OF INJURY

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

A. Multiple gunshot wounds:

Gunshot wound of the head;

A gunshot entrance wound is on the underside of the jaw located 9-inches below the top of the head and 3/4-inches to the left of the anterior midline. The circular wound measures 3/8-inches in diameter. No soot or stippling is present within the wound or on the surrounding skin. The wound path perforates skin, basilar skull (predominantly the sphenoid bone), right cerebral hemisphere, sagittal suture at the vertex of the calvarium, and right parietal scalp. The bullet exits the vertex of the head 1/2-inches to the right of the anterior midline via an obliquely oriented (along the 5 to 11 o'clock axis) 1 1/2 x 3/4-inch lacerated wound with extension lacerations measuring up to 3/4-inches. No bullet or bullet fragments are recovered. The wound path is directed slightly front to back, slightly left to right, and upwards. Associated with the wound path is bleeding into the wound tract, comminuted fractures of the basilar skull (disruption of both anterior and both middle cranial fossae), linear fractures of the frontal and left parietal bones, diastatic fractures along the coronal and sagittal sutures, pulpifying lacerations of both frontal lobes of the brain, diffuse subarachnoid hemorrhage, bilateral periorbital ecchymosis, avulsive loss of the pituitary gland, and disruption of the circle of Willis.

II. Gunshot wound of the head:

A gunshot entrance wound is on the right temporal scalp located 3 1/4-inches below the top the head and 4-inches to the right of the anterior midline. The circular wound measures 1/4-inches with an eccentric marginal abrasion along the 6 to 12 o'clock margin measuring up to 1/8-inches at the 9 o'clock position. There is a cone of dense gunpowder stippling extending from the 12 to 6 o'clock margin 2-inches onto the right side of the forehead. The wound path perforates the right temporal scalp, the right side of the calvarium at the pterion, both

Evidence of Injury (cont):

II. Gunshot wound of the head (cont):

frontal lobes of the brain, left temporal bone, and left temporal scalp. The bullet exits the left temporal scalp via a 1/2-inch lacerated exit wound located 2 3/4-inches below the top the head and 3 5/8-inches to the left of the anterior midline. No bullet or bullet fragments are recovered. The wound path is directed right to left, slightly back to front, and slightly upward. Associated with the wound path is bleeding into the wound tract, comminuted fractures of the basilar skull (disruption of both anterior and both middle cranial fossae), linear fractures of the frontal and left parietal bones, diastatic fractures along the coronal and sagittal sutures, pulpifying lacerations of both frontal lobes of the brain, diffuse subarachnoid hemorrhage, subgaleal hemorrhage overlying fractures of both temporal bones and the occipital bone, and bilateral periorbital ecchymosis.

III. Gunshot wound of the chest:

On the right anterior chest is a gunshot entrance wound located 6-inches below the top the shoulder and 5 1/2-inches to the right of the anterior midline of the torso. The horizontally oriented ovoid wound measures 3/8 x 1/4-inches with an eccentric marginal abrasion along the lateral margin of the wound measuring up to 1/2-inches at the 9 o'clock position. Faint gunpowder stippling extends from the lateral margin of the abraded entrance wound measuring up to 1-inch at the 9 o'clock position. On the lateral right arm is a 3/4 x 1/2-inch area of faint stippling. The wound path perforates skin, muscle, anterior right third rib, soft tissues of the anterior mediastinum, left anterior 4th intercostal space, muscle, and skin. The bullet exits the left anterior chest along the anterior axillary line via a 1/2-inch lacerated exit wound with eccentric marginal abrasion along the 12 to 6 o'clock margin measuring up to 1/8-inch at the 3 o'clock position that is located 8-inches below the top the shoulder and 8-inches to the left of the anterior midline. No bullet or bullet fragments are recovered. The wound path is directed front to back, right to left, and slightly downward. Associated with the wound path is bleeding into the wound tract, non quantifiable hemorrhage into the anterior mediastinum, fractures of the anterior aspects of the 2nd through 4th ribs bilaterally, fracture of the sternum at the level of the 3rd ribs, and contusions of the upper lobes of both lungs.

IV. Gunshot wound of the left arm:

On the anterior left arm is a gunshot entrance wound located 8-inches below the top of the shoulder and in the midline of the upper extremity in the anatomic position. The circular wound measures 3/8-inches in diameter and has an adjacent vertically oriented discontinuous 2 x 3/8-inch contused abrasion. No soot or gun powder stippling are at present within the wound or on the surrounding skin. The wound path perforates skin, subcutaneous tissues, muscle, subcutaneous tissues, and skin. The bullet exits the posterior left arm via a 1/4-inch diameter lacerated exit wound located 8-inches below the top of the shoulder and in the posterior midline of the upper extremity in the anatomic position. No bullet or bullet fragments are recovered. The wound path is

Evidence of Injury (cont):

directed right to left, front to back, and without vertical deviation. Associated with the wound path is bleeding into the wound tract.

B. Additional autopsy findings

I. Injuries to the Head and Neck: Above the lateral right eyebrow at the frontal hairline is a 3/4 x 1/2-inch superficial abrasion. Blood drains from both the external auditory canals.

II. Injuries to the torso:

On the left anterior chest approximately 4 inches below the left nipple is an obliquely oriented (along the 5 to 11 o'clock axis) 3/4 x 1/4-inch superficial abrasion. In the left lower quadrant of the abdomen are 2 discontinuous horizontally oriented curvilinear abrasions spaced approximately 1 1/2-inches apart and measuring up to 4 1/4-inches in greatest dimension. Above the left iliac crest is a 3/4 x 1/2-inch superficial abrasion. Along the left inguinal crease and anterior upper thighs is a 4 x 2 1/2-inch cluster of discontinuous superficial abrasions measuring up to 2-inches in greatest dimension.

III. Injuries to the extremities:

On the lateral dorsal aspect of the distal right forearm is a horizontally oriented faint 2 1/4 x 1/8-inch contusion without injury to the underlying soft tissues. On the distal left forearm is a circumferential 1/8-inch superficial contusion without injury to the underlying soft tissues.

On the anterior left thigh is a 7 x 5-inch cluster of patterned (paired markings with an approximate 1 1/2-inch spacing) superficial commingled abrasions and superficial puncture wounds measuring up to 1-inch in greatest dimension. Similar clusters of superficial abrasions and superficial puncture wounds measuring up to 1-inch in greatest dimension are noted on the left knee, proximal medial left leg, left popliteal fossa, and left proximal posterior leg. Reflection of the skin and subcutaneous tissues of the back, buttocks, and extremities with incision of the underlying muscles demonstrates no evidence of significant blunt force injuries.

INTERNAL EXAMINATION

The following descriptions pertain to uninjured tissues. See "Evidence of Injury" section for additional information.

BODY CAVITIES:

(See "Evidence of Injury")

The body is opened by the usual thoraco-abdominal incision and the chest plate is removed. The vertebral bodies are visibly and palpably intact. No adhesions or abnormal collections of fluid are present in the pleural, pericardial, or peritoneal cavities. All body organs are present in their normal anatomic positions. There is no internal evidence of blunt force or penetrating injury to the thoraco-abdominal region.

The subcutaneous fat layer of the abdominal wall is 1/2-inches thick.

HEAD AND CENTRAL NERVOUS SYSTEM:

(See above "Evidence of Injury")

The scalp is reflected. No epidural or subdural hemorrhages are noted. The leptomeninges are thin and delicate, the brain weighs 1420-grams. Where uninjured, the cerebral hemispheres are symmetrical with unremarkable gyri and sulci. The structures at the base of the brain, including cranial nerves and blood vessels, have no non-traumatic abnormalities.

Coronal sections of the uninjured tissues demonstrate sharp demarcation between white and grey matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum, and arterial systems are free of non-traumatic abnormalities. The atlanto-occipital joint is stable.

NECK:

The anterior strap muscles of the neck are homogeneous and red-brown, without hemorrhage. 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.

RESPIRATORY SYSTEM:

(See above "Evidence of Injury")

The upper airway is clear of debris and foreign material; the mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces are smooth, glistening and unremarkable bilaterally. The pulmonary parenchyma, where uninjured, is salmon pink, diffusely congested and edematous, exuding slight to moderate amounts of blood and frothy fluid. No mass lesions or areas of consolidation are present. The right and left lungs weigh 710 and 500-grams, respectively.

CARDIOVASCULAR SYSTEM:

(See above "Evidence of Injury")

The pericardial surfaces are smooth, glistening and unremarkable. The 310-gram heart is contained in an intact pericardial sac free of significant fluid or adhesions. The epicardial surface is smooth, with minimal fat investment. The coronary arteries arise normally, follow the usual distribution in a right dominant pattern, are widely patent, and without evidence of thrombosis or significant atherosclerosis. The myocardium is homogeneous, red-brown, firm and unremarkable; the atrial and ventricular septae are intact. The walls of the left and right ventricles are 1.0 and 0.3-centimeters thick, respectively. The valve leaflets are thin and mobile. The aorta and its major branches arise normally, follow the usual course and are free of significant abnormalities. There is mild atherosclerotic streaking in the thoracic aorta. The venae cavae and their major tributaries return to the heart in the usual distribution and are free of thrombi. The renal and mesenteric vessels are unremarkable.

HEPATOBILIARY SYSTEM:

The hepatic capsule is smooth, glistening and intact, covering dark red-brown, moderately congested parenchyma. No mass lesions or other abnormalities are noted. The gallbladder contains 5-milliliters of green-brown mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent and without evidence of calculi. The liver weighs 1690-grams.

GASTROINTESTINAL TRACT:

The esophagus is intact and lined by smooth, gray-white mucosa. The gastric wall is intact and the stomach contains approximately 30-milliliters of thin tan fluid. The gastric mucosa is arranged in the usual rugal folds. The duodenum, loops of small bowel and colon are unremarkable. The appendix is present.

GENITOURINARY SYSTEM:

The right and left kidneys weigh 120 and 110-grams, respectively. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, red-brown cortical surface. The cut surfaces are red-tan and congested, with uniformly thick cortices and sharp corticomedullary junctions. The pelves and calyces are unremarkable. The ureters are normal in course and caliber. White bladder mucosa overlies an intact bladder wall. The urinary bladder is empty. The prostate is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

LYMPHORETICULAR SYSTEM:

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

ENDOCRINE SYSTEM:

(See above "Evidence of Injury")

The thyroid gland is symmetric and red-brown, without cystic or nodular change. The pancreas is firm and yellow-tan, with the usual lobular architecture. No mass lesions or other abnormalities are noted. The right and left adrenal glands are symmetric, with bright yellow cortices and grey medullae. No masses or areas of hemorrhage are identified.

MUSCULOSKELETAL SYSTEM:

Muscle development appears normal. No non-traumatic bone or joint abnormalities are noted.

ADDITIONAL PROCEDURES

- Documentary photographs are taken by (b)(6)
 OAFME staff photographer.
- Specimens retained for toxicology testing and/or DNA identification are: Blood, vitreous fluid, gastric contents, bile, heart, spleen, liver, lung, kidney, brain, adipose tissue, and skeletal muscle.
- 3. Full body radiographs are obtained and demonstrate the above findings.
- 4. Selected portions of organs are retained in formalin.
- 5. The dissected organs are forwarded with the body.
- 6. Personal effects are released to the mortuary affairs representatives.

MICROSCOPIC EXAMINATION

Selected portions of organs are retained in formalin, without preparation of histologic slides.

FINAL AUTOPSY DIAGNOSES:

- Multiple gunshot wounds
 - A. Gunshot wound of the head
 - Entrance: On the underside of the jaw, to the left of the anterior midline. No
 evidence of close range discharge of a firearm.
 - Injured: Skin, basilar skull (predominantly the sphenoid bone), right cerebral hemisphere, sagittal suture at the vertex of the calvarium, and right parietal scalp
 - 3. Exit: Vertex of the head, to the right of the midline
 - 4. Recovered: No bullet or bullet fragments are recovered
 - 5. Direction: Slightly front to back, slightly left to right, and upwards
 - 6. Associated injuries: Bleeding into the wound tract, comminuted fractures of the basilar skull (disruption of both anterior and both middle cranial fossae), linear fractures of the frontal and left parietal bones, diastatic fractures along the coronal and sagittal sutures, pulpifying lacerations of both frontal lobes of the brain, diffuse subarachnoid hemorrhage, bilateral periorbital ecchymosis, avulsive loss of the pituitary gland, and disruption of the circle of Willis
 - B. Gunshot wound of the head
 - Entrance: Right temporal scalp. Dense stippling on the skin of the forehead adjacent to the wound.
 - Injured: Right temporal scalp, the right side of the calvarium at the pterion, both frontal lobes of the brain, left temporal bone, and left temporal scalp
 - 3. Exit: Left temporal scalp
 - 4. Recovered: No bullet or bullet fragments are recovered
 - 5. Direction: Right to left, slightly back to front, and slightly upward
 - 6. Associated injuries: Bleeding into the wound tract, comminuted fractures of the basilar skull (disruption of both anterior and both middle cranial fossae), linear fractures of the frontal and left parietal bones, diastatic fractures along the coronal and sagittal sutures, pulpifying lacerations of both frontal lobes of the brain, diffuse subarachnoid hemorrhage, subgaleal hemorrhage overlying fractures of both temporal bones and the occipital bone, and bilateral periorbital ecchymosis
 - C. Gunshot wound of the chest
 - Entrance: Right anterior chest. Stippling on the right lateral edge of the wound and on the lateral right arm
 - Injured: Skin, muscle, anterior right third rib, soft tissues of the anterior mediastinum, left anterior 4th intercostal space, muscle, and skin
 - 3. Exit: Left anterior chest along the anterior axillary line
 - 4. Recovered: No bullet or bullet fragments are recovered
 - 5. Direction: Front to back, right to left, and slightly downward
 - 6. Associated injuries: Bleeding into the wound tract, non quantifiable hemorrhage into the anterior mediastinum, fractures of the anterior aspects of the 2nd through 4th ribs bilaterally, fracture of the sternum at the level of the 3rd ribs, and contusions of the upper lobes of both lungs.

- D. Gunshot wound of the left arm
- 1. Entrance: Anterior left arm. No evidence of close range discharge of a firearm
- 2. Injured: Skin, subcutaneous tissues, muscle, subcutaneous tissues, and skin
- 3. Exit: Posterior left arm
- 4. Recovered: No bullet or bullet fragments are recovered
- 5. Direction: Right to left, front to back and without significant vertical deviation
- Associated injuries: Bleeding into the wound tract
- II. Additional injuries
 - A. Superficial abrasion of the face
 - Superficial patterned abrasions and superficial puncture wounds of the torso and left lower extremity
 - C. Superficial contusions of both forearms without underlying soft tissue injury
- Evidence of natural disease consists of mild atherosclerotic streaking of the thoracic aorta
- No evidence of medical intervention is in place at the time of autopsy
- V. Postmortem changes
 - A. Lividity is fixed on the posterior surface of the body except in areas exposed to pressure
 - B. Rigor is present to an equal degree in all extremities
- VI. Toxicology results
 - A. Volatiles: The blood and vitreous fluid were examined for the presence of ethanol at a cutoff of 20 mg/dL. No ethanol was detected.
 - B. Drugs: The blood was screened for acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, mefloquine, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, salicylates, sympathomimetic amines, and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected: None detected.
 - C. Carbon Monoxide: The carboxyhemoglobin saturation in the blood was 6% as determined by spectrophotometrry with a limit of quantitation of 1%. Carboxyhemoglobin saturations of 0-3% are expected for non-smokeers and 3-10% for smokers. Saturations above 10% are considered elevated and are confirmed by gas chromatography.
 - D. Cyanide: There was no cyanide detected in the blood. The limit of quantitation for cyanide is 0.25 mg/L.

OPINION

This approximately 30-year old detainee (b)(6) died as the result of multiple (4) gunshot wounds. There are two (2) gunshot wounds of the head. Evidence of intermediate range discharge of a firearm is noted surrounding the entrance wound on the right temple. No evidence of close range discharge of a firearm is noted on the entrance wound beneath the chin. Co-mingling of the wound paths in the head does not allow for identification of the order of infliction. The severity of the combined gunshot wounds to the head would have resulted in immediate death. The gunshot wound of the chest injured the ribs, sternum, and soft tissues of the anterior chest cavity. Evidence of intermediate range discharge of a firearm is noted on the surrounding tissues of the chest and right arm. Although not injuring vital structures directly, this injury may have ultimately resulted in death. The gunshot wound of the left arm did not injure vital structures and most likely represents re-entry of the projectile that exited the left side of the chest. No bullet or bullet fragments were recovered.

The injuries to both forearms are consistent with the reported use of restraints. No restraints were available for examination at the time of autopsy. The additional superficial patterned injuries on the torso and left leg did not injure vital structures.

Postmortem analysis of the body fluids was negative for the presence of ethanol, carbon monoxide, cyanide, screened medications and screened illicit drugs of abuse.

(b)(6)	manner of death is best classified as nomicide.	
(b)(6)	Medical Examiner	

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ACLU Detainee DeathII ARMY MEDCOM 1103 DD1 APR 77 2064



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: Al Hanashi, Muhammad Ahmad A.S.Au	topsy No.: (b)(6)
ID No: (b)(6)	AFIP No. (b)(6)
Date of Birth: Unknown	Rank: Civilian (Detainee)
Date of Death:(b)(6) 2009	Place of Death: Guantanamo Bay
Date of Autopsy: 03 JUN 2009, 1300 hours	Place of Autopsy: US Naval Hospital
Date of Report: 23 JUN 2009	Guantanamo Bay, Cuba
Circumstances of Death: (b)(6) a civilian	detainee, was found unresponsive with a
ligature (elastic band) around his neck in his cel Joint Task Force Guantanamo Bay, Cuba at app	at the Behavior Health Unit (BHU).
The ligature was cut and resuscitation efforts we continued at the local medical treatment facility pronounced dead at 2259 hours.	ere started immediately in the cell and
(b)(6) medical records reveal a long	history of adjustment disorder, anti-social
personality disorder and stressors of confinemer gestures and multiple failed suicide attempts. H 2009 and was enteraly fed. The case is under in	nt. He has a history of suicide ideations le was on hunger strike since January
Investigative Service (NCIS).	
Authorization for Autopsy: Office of the Am 10 US Code 1471	ned Forces Medical Examiner, IAW Title
Identification: (b)(6)	is identified by visual recognition and his
detainee identifications tags. Fingerprints are of collected for DNA identification, if needed.	
CAUSE OF DEATH:	
Asphyxia due to ligature strangulation	
MANNER OF DEATH:	
Suicide	

NCIS PRELIMINARY INVESTIGATION

According to preliminary NCIS investigation, while the shift guards were performing periodic checks on the detainees at the BHU, the decedent was viewed through the cell window and noted to not be breathing. He was seen on the floor of his cell, on his right side in the fetal position. (b)(6) was reported to have been covered with a blanket with his hands and feet exposed. He was facing the right cell wall with head slightly tilted. The guards entered the cell and secured the decedent's hands and feet prior to placing him on his back. The guards noticed a ligature consisting of an elastic band tightly wrapped at least twice around the neck and twisted on the left side. The ligature was wrapped tightly and had to be cut (at the most twisted part) from the decedent's neck. It was removed in two pieces. No pulse or spontaneous breathing was noted. CPR was immediately started. Passive vomiting occurred during CPR.

At approximately 2120 hours the decedent requested to speak to a nurse and asked for a sleeping aid. He was last known alive approximately 10-15 minutes later when he asked the guard to close his "bean hole cover", a sign that he was ready to go to sleep. He appeared, to the guards, in "good spirit" and did not appear upset. He was discovered unresponsive a few minutes later at approximately 2155 hours.

MEDICAL RECORDS REVIEW

The available mental health records are screened by the prosector and the ovserving civilian medical examiner prior to the autopsy; see "Postmortem Examination".

Screening of the mental health records reveals a psychiatric history of adjustment disorder, antisocial personality disorder and stressors of confinement. The decedent has a history of suicide ideations, suicide gestures and multiple suicide attempts by hanging, neck ligature, self inflicted sharp force injuries and frequent blunt force trauma to the head. On January 2009 he started a hunger strike and has been fed enteraly. He has been on a suicide watch at the BHU, where he is seen daily by the medical staff. He had five suicide attempts in May 2009.

LIGATURE

The ligature is collected as evidence by NCIS at the scene and examined by the prosector and the observing civilian medical examiner prior to the autopsy.

The ligature is almost identical to the elastic band of a white brief, medium size 34-36, issued to the detainees at the detention facility. The ligature consists of two segments, with a combined aggregate length of approximately 23 ½" and width of approximately 1". The smaller of the two segments measures 6 ½" in length. The ligature fibers are

elongated and distorted at the junction of the two cut edges c/w the history of cutting the ligature at the twisted part. There are no blood stains noted on the ligature.

POSTMORTEM EXAMINATION

The postmortem examination, (b)(6)	of (b)(6)	is performed at the
US Naval Hospital (USNH), Guanta	namo Bay, Cuba or (b)(6)	2009, starting at
approximately 1300 hours. Full box	dy radiological studies are o	obtained at the USNH.
Photographs are obtained by (b)(6)		otographer. Attending the
autopsy as medicolegal observers are	e(b)(6) M	fedical Examiner (b)(6)
(b)(6) and Special Agents (b)(6)		rom the NCIS.

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished Caucasian male clad in khaki shirt and pants without undergarments; see "Clothing and Personal Effects". The feet are held together with white plastic flexi cuffs and the hands are held together with black plastic flexi cuffs. The flexi cuffs were cut open to facilitate the completion of the radiological studies. The hands are covered in brown paper bags, secured by adhesive tape; see "Evidence". A blue colored plastic identification band encircles the right wrist.

The height and weight noted on the identification wrist band are 68" and 120 lb, respectively. The body appears consistent with the reported height and weight. 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. Body temperature is cold due to refrigeration.

The scalp hair is black, long, covers the back of the neck and is matted. Vomit is noted on the top and back of the head. The facial hair consists of black mustache and beard. The forehead reveals dark small raised lesions; see "Evidence of Injuries". The eyes are unremarkable. The irides are brown. The corneae are slightly cloudy. The conjunctivae appear injected with no significant petechiae. The sclerae are white with no petechiae. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal skeleton is palpably intact. The tongue is unremarkable. The lips are without evident injury. The frenulae are unremarkable. The teeth are natural and unremarkable. Examination of the neck reveals a broad patterned impression on the anterior neck and dark colored impression on the posterior neck; see "Evidence of Injury".

The chest is unremarkable. No injury of the ribs or sternum is evident externally. The abdomen is unremarkable with no evidence of major surgical scars. The posterior torso is unremarkable with no evidence of trauma. A healing ¾ x ½" ulcer of unknown etiology is

AUTOPSY REPORT (b)(6) AL HANASHI, Muhammad Ahmad A. S.

noted on the right lower back, immediately below the waist. The external genitalia are those of a normal adult circumcised male.

The extremities are unremarkable with no evidence of recent trauma. Linear broad impressions are noted on the right wrist and ankles, consistent with the history of use of the flexi cuff ties.

Multiple well healed scars are noted on the right anterior neck, scalp, right arm, right shoulder, left anticubital fossa, left thumb, both knees, left shin and the dorsal surface of the left foot; photographed for documentation. No tattoos, other major surgical scars or identifying marks are noted.

EVIDENCE OF INJURY

Neck Trauma:

External examination of the neck reveals a ligature impression around the neck. A broad reddish discoloration is noted on the skin of the anterior neck, overlying the thyroid cartilage measuring 1 1/2" in it maximum width on the midline. The ligature mark has a maximum width of 1 ½" at the anterior midline, is slightly upwardly angled towards the posterior neck. The ligature impression on the right side of the neck is tapered into a triangular shape with its apex below the angle of the mandible and is associated with non-patterned faint contusions, see "Opinion". The ligature impression is incomplete and fades and disappears below the ears. A small superficial abrasion is noted below the right ear; see "Opinion". A thin dark linear discoloration is noted on the posterior neck; see "Opinion".

Dissection and examination of the strap muscles of the neck reveals localized hemorrhage on the right side of the sterno-hyoid muscle, underlying the above noted ligature impression and contusion on the right side of the neck. No other trauma is noted. The hyoid bone and thyroid cartilage are intact.

Other Injuries:

Examination of the forehead reveals a small cluster of dark raised lesions, on the midline, in an area measuring ¾ x ½" with underlying mild subcutaneous hemorrhage and no underlying skull fractures; see "Opinion".

A fracture of the anterior right 5th rib is noted with minimal surrounding hemorrhage; see "Opinion".

AUTOPSY REPORT (b)(6) AL HANASHI, Muhammad Ahmad A. S.

A well healed scar overlies a malunion fracture of the right humerus is noted, consistent with remote unrelated trauma (firearm injury in 2002 per medical records). There is a superficial healing abrasion on the left shin. No other significant injuries are noted.

Serial incisions on the back and upper and lower extremities reveal no evidence of trauma. The incisions are photographed for documentation.

CLOTHING and PERSONAL EFFECTS

The deceased is clad in khaki shirt and pants, general issue of the detention center. No personal effects are noted on the body. The clothing is photographed and collected by NCIS present during autopsy.

MEDICAL INTERVENTION

Evidence of active medical intervention is noted as follows:

- An endotracheal tube.
- Central venous line
- Multiple intravenous puncture sites on right arm and anticubital fossa.
- External automatic defibrillator pads on the chest.

INTERNAL EXAMINATION

BODY CAVITIES:

Bilateral adhesions are noted in both pleural cavities. No abnormal collections of fluid are present in any of the body cavities. All body organs are present in the normal anatomical position. The subcutaneous fat layer of the abdominal wall is unremarkable. There is no internal evidence of blunt or sharp force injury to the thoraco-abdominal region.

HEAD: (CENTRAL NERVOUS SYSTEM)

See "Evidence of Injury"

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. Coronal sections through the cerebral hemispheres reveal no lesions. Transverse sections through the brain stem and cerebellum are unremarkable. The brain weighs 1300 grams. Serial sectioning of the brain reveals unremarkable parenchyma and no evidence of trauma.

AUTOPSY REPORT (b)(6) AL HANASHI, Muhammad Ahmad A. S.

NECK:

See "Evidence of Injury".

Examination of the soft tissues of the neck including strap muscles, thyroid gland and large vessels are unremarkable and without traumatic abnormalities. The hyoid bone and thyroid cartilage are intact.

CARDIOVASCULAR SYSTEM:

The pericardial surfaces are smooth, glistening and unremarkable; the pericardial sac is free of significant fluid and adhesions. The coronary arteries arise normally, follow the usual distribution and are widely patent with no atherosclerotic changes. The epicardium is smooth and unremarkable. The myocardium is dark red-brown, firm and grossly

unremarkable. The valves exhibit the usual size, texture and position relationship and are unremarkable. The aorta and its major branches arise normally, follow the usual course and are widely patent, free of 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 280 grams.

RESPIRATORY SYSTEM:

The upper airway is clear of debris and foreign material; the mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces reveal presence of bilateral adhesions, more pronounced on the posterior and lateral surfaces. The pulmonary parenchyma is red-purple and exudes a moderate amount of bloody fluid with no focal lesions identified. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right and left lung weigh 650 grams and 600 grams, respectively.

LIVER & BILIARY SYSTEM:

The hepatic capsule is smooth, glistening and intact, covering dark red-brown, moderately congested parenchyma with no focal lesions noted. The gallbladder contains green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi. The liver weighs 1300 grams.

ALIMENTARY TRACT:

The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and is unremarkable. The stomach is distended with partially digested food with no evidence of mucosal or vascular injury. The small and large bowels are unremarkable. The pancreas has a normal pink-tan lobulated appearance and the ducts are patent. The appendix is present and unremarkable.

GENITOURINARY SYSTEM:

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. The urinary bladder is unremarkable and contains clear yellow urine. The right and left kidneys weigh 100 grams each.

The external genitalia are those of a circumcised adult male with bilaterally descended unremarkable testes.

RETICULOENDOTHELIAL SYSTEM:

The spleen has a smooth, intact capsule covering red-purple, moderately firm parenchyma; the lymphoid follicles are unremarkable. The regional lymph nodes appear normal. The spleen weighs 120 grams.

ENDOCRINE SYSTEM:

The pituitary, thyroid and adrenal glands are unremarkable.

MUSCULOSKELETAL SYSTEM:

See "Evidence of Injury".

Muscle development is normal. No other bone or joint abnormalities are noted.

EVIDENCE

The clothing, plastic flexi cuffs and the brown bags around the hands are collected and submitted to the NCIS agents attending the autopsy. The ligature is examined and retained by NCIS.

(Note: An intact white brief similar to the one issued to the decedent is provided by NCIS for examination and comparison to the ligature. The ligature is identical to the elastic band of the examined brief)

RADIOLOGICAL STUDIES

Radiographs reveal no recent skeletal fractures or abnormalities. A remote healed (malunion) fractured right humerus is noted.

MICROSCOPIC EXAMINATION

Representative sections of the major organs are retained without preparation of histological slides.

TOXICOLOGY

Carbon Monoxide:

- Carboxyhemoglbin saturation in blood is less than 1% (expected normal limits)
 Cyanide:
 - Not detected

Volatiles (Blood and Vitreous fluid):

No ethanol is detected.

Screened medication and drugs of abuse:

Screened in urine and confirmed in blood:

Positive Acetaminophen 5 mg/L (0.5 mg %)

Positive Benzodiazepine: Lorazepam 0.025 mg/L (0.003 mg %)

Positive Benzodiazepine: 7-Aminoclonazepam 0.03 mg/L (0.003 mg %)
Positive Sympathomimetic amine: Pseudoephedrine 0.3 mg/L (0.03 mg%)

ADDITIONAL PROCEDURES

- Documentary photographs are taken by OAFME photographer, (b)(6)
 (b)(6)
- Full body radiographs are obtained by Department of Radiology, Naval Hospital Guantanamo Bay, Cuba.
- Specimens retained for toxicological and/or DNA identification are: Blood (heart), vitreous fluid, bile, urine, stomach contents, and tissue samples from liver, lung, kidney, spleen, brain, psoas and heart muscle and adipose tissue.
- Representative sections of organs are retained in formalin without preparation of histological slides.
- Clothing and other evidence are photographed for documentation and submitted to NCIS agents attending the autopsy.

FINAL AUTOPSY DIAGNOSIS

I. Asphyxia by ligature strangulation:

- A. Ligature mark partially encircling the neck with possible twist on the right side.
- B. No evidence of other neck trauma or fractures.
- C. No evidence of significant traumatic injuries.

II. Evidence:

- Collected evidence submitted to NCIS.

III. Toxicology:

- A. Volatiles (Blood and Vitreous fluid): No ethanol is found.
- B. Screened drugs of abuse and medications (Blood): Positive for: Acetaminophen, Benzodiazepine and its metabolites and Pseudoephedrine.

OPINION

(b)(6)	a civilian detainee of unknown age,
	ation by tightly wrapping the elastic band of eck and apparently securing it with a twist on
the right side of the neck and a head tilt. A significant trauma or evidence of maltreatn	Autopsy reveals no evidence of other

The raised lesions noted on the forehead are consistent with reported history of witnessed repeated self-inflected hitting/banging of the head on the detention facility walls. The contusions noted on the right side of the neck may be associated with the ligature twist or by the guards' initial attempts to manually remove the ligature. The non-displaced right 5th rib fracture noted during examination is consistent with CPR and resuscitation efforts.

Toxicological studies positive for Acetaminophen, Benzodiazepine and its metabolite and Pseudoephedrine. The positive medications are within their therapeutic level and are non-contributory to the cause of death.

Review of the decedent's medical records reveals multiple stressors, multiple suicide ideations and gestures and multiple suicide attempts by multiple modalities as early as 2003. The decedent was on hunger strike since January 2009 and had five suicide attempts in May 2009.

Based upon the available	information, the man	ner of death is "Suicide"
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ARMED FORCES INSTITUTE OF PATHOLOGY Office of the Armed Forces Medical Examiner

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



Autopsy No. (b)(6)

Place of Death: Iraq

Rank: Civilian Detainee

AFIP No.: (b)(6)

AUTOPSY EXAMINATION REPORT

Name: (BTB) HAMID, Adnan Naif

ISN: (b)(6)

TMEP (b)(6)

Date of Birth: (BTB)(b)(6) 1966

Date of Death: (b)(6) 2009

Date/Time of Autopsy: 19 MAY 2009 @ 1130 Place of Autopsy: Port Mortuary, Dover AFB, DE

Date of Report: 07 JUL 2009

Circumstances of Death: This 43-year-old Iraqi Civilian detainee, who had a medical history significant for anemia and thrombocytopenia, began to experience acute distress which resulted in death despite aggressive resuscitation efforts.

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

Identification: Positive identification is established by comparison of postmortem fingerprint examination and antemortem fingerprint records. A postmortem DNA sample is obtained.

CAUSE OF DEATH:

PULMONARY EMBOLISM

MANNER OF DEATH:

NATURAL

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished Caucasoid male received unclad. The body weighs 167-pounds, is 64-inches in length and appears compatible with the reported age of 33-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. The body is unembalmed.

The head is normocephalic, and the scalp hair is gray-black and up to 1 ½-inches in length. Facial hair consists of a gray-black moustache and beard stubble. The irides are brown, the pupils are round and equal in size, the corneae are cloudy, the conjunctivae are unremarkable, 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. Evidence of medical therapy is present, see below.

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. Evidence of medical therapy is present, see below. 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, and the pubic hair is in an appropriate distribution. The posterior torso and anus are without note.

The extremities are symmetric and normally formed without evidence of significant recent trauma. A 1/2 x 1/2-inch abrasion is on the right knee region. The fingernails are trimmed and intact. The toenails are unremarkable. Tattoos are not noted on the extremities.

CLOTHING AND PERSONAL EFFECTS

- A green personal effects bag accompanies the body which contains an identification band which matches the reported name and ISN of the decedent.
- No clothing or other personal effects accompanies the remains.

MEDICAL INTERVENTION

- A therapeutic needle stick-mark on the right side of the neck is covered by medical gauze and tape
- Defibrillator burn/abrasion on the central chest
- Therapeutic needle stick-marks in both antecubital fossae

RADIOGRAPHS

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

- No recent fractures
- No metallic foreign bodies

Page 3 of 7

EVIDENCE OF INJURY

There is no evidence of significant recent injury.

INTERNAL EXAMINATION

BODY CAVITIES:

The body is opened by the usual thoraco-abdominal incision and the chest plate is removed. The sternum and vertebral bodies are visibly and palpably intact. 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 anterior $2^{nd} - 5^{th}$ right ribs and the left $2^{nd} - 4^{th}$ left ribs are fractured with associated soft tissue hemorrhage.

The subcutaneous fat layer of the abdominal wall is 34-inches thick.

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 1,300-grams. Coronal sections through the cerebral hemispheres reveal no lesions. The ventricles of the brain are of normal size and contain clear cerebrospinal fluid. Transverse sections through the brain stem and cerebellum are unremarkable; as is the upper spinal cord. 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 white mucosa. The tongue is free of bite marks, hemorrhage, or other injuries.

CARDIOVASCULAR SYSTEM:

The 420-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 the following: the left anterior descending coronary artery has multifocal luminal narrowing greater than 75% by calcified atherosclerotic plaque. The mid-portion of the left circumflex coronary artery has 50% focal luminal narrowing, and the right coronary artery has multifocal luminal narrowing greater than 75% narrowing by atherosclerotic plaque.

The myocardium is homogenous, red-brown, 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 1.8, 1.9, and 0.6-centimeters thick, respectively. The chambers of the

AUTOPSY REPORT	(b)(6)
HAMID, Adnan N.	-5-

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heart are not dilated, and the endocardium is smooth and glistening.

The aorta has moderate calcified atherosclerosis, predominantly in the abdominal region, 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, yellowtan and unremarkable. The parietal pleural surfaces are smooth, glistening and unremarkable bilaterally.

The right lung weighs 960-grams; the left 580-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 and glistening with anthracosis bilaterally.

The pulmonary arteries are normally developed and patent. The lumens of the right and left pulmonary arteries are occluded by multiple fragments of thrombi. The emboli have striations, tributary casts and valve markings and are of a caliber consistent with a venous origin. Emboli are found extending into the peripheral branches of the pulmonary arteries in the lung parenchyma.

HEPATOBILIARY SYSTEM:

The 1,640-gram liver has an intact smooth capsule covering moderately congested tan-brown parenchyma with no focal lesions noted.

The gallbladder contains 10-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-milliliters of brown fluid with food.

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 130-grams; the left 140-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 cortex of the left kidney has a 0.8 x 0.5-centimeter wedge-shaped region of hemorrhage with central calcification. The calyces, pelves and ureters are unremarkable.

White bladder mucosa overlies an intact bladder wall. The bladder contains approximately 5-milliliters of cloudy urine. The testes, prostate gland and seminal vesicles are without note.

AUTOPSY REPORT	(b)(6)
HAMID, Adnan N.	-

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LYMPHORETICULAR SYSTEM:

The thymus is small, fatty and otherwise unremarkable. The 320-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. The hilar lymph nodes demonstrate mild anthracosis, but are otherwise unremarkable.

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:

No abnormalities of muscle or bone are identified.

Superficial posterior incisions fail to demonstrate any injuries of the posterior torso; extended dissection around the ankle and wrist regions fail to demonstrate any evidence of binding or physical restraint.

Dissections of the deep veins of both posterior legs fail to demonstrate thrombosis.

MICROSCOPIC EXAMINATION

Selected portions of organs are retained in formalin, without preparation of histology slides.

TOXICOLOGY

<u>VOLATILES</u>: The blood and vitreous fluid are examined for the presence of volatile compounds including ethanol at a cutoff of 20-milligrams per deciliter. No ethanol is detected.

<u>DRUGS</u>: The blood is screened for medications and drugs of abuse including acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, mefloquine, 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:

<u>Positive Lidocaine</u>: Lidocaine is detected in the blood by gas chromatography and confirmed by gas chromatography/mass spectrometry.

<u>CARBON MONOXIDE</u>: The carboxyhemoglobin saturation in the blood is less than 1% as determined by spectrophotometry with a limit of quantitation of 1%. Saturations above 10% are considered elevated and are confirmed by gas chromatography.

<u>CYANIDE</u>: The blood is tested for cyanide with a limit of quantitation of 0.25-milligrams per liter. No cyanide is detected.

ADDITIONAL PROCEDURES

Documentary photographs are taken by (b)(6)
 AFMES staff photographer.

Autopsy assistance is provided by (b)(6)
 AFMES autopsy assistant.

- The Criminal Investigative Division (CID) representative attending the autopsy is Special Agent (b)(6)
- 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.
- The unembalmed body and dissected organs are returned to the point of origin by Mortuary Operations personnel.

FINAL AUTOPSY DIAGNOSES

I. Pulmonary Embolism

- A. Both pulmonary arteries are occluded by multiple fragments of thrombotic emboli which extend into the deep parenchymal branches
- The emboli have striations, tributary casts and valve markings, consistent with a deep venous thrombotic origin
- C. Associated pulmonary congestion, bilateral
- D. Deep venous thromboses are not identified within-the limitations of this examination (the origin of the thrombotic emboli is not identified)

II. Hypertensive Arteriosclerotic Cardiovascular Disease

- A. Mild cardiomegaly (heart weight is 420-grams; the expected maximal heart weight is 334-grams for body weight) with concentric left ventricular hypertrophy
- B. Severe arteriosclerotic disease all three major coronary arteries
- C. Moderate calcified atherosclerosis in the abdominal aorta
- D. Probable embolic infarct of the left kidney

III. Splenomegaly (spleen weight is 320-grams; the expected maximal spleen weight is 134-grams for body weight)

No evidence of abuse or physical restraint is identified.

V. Evidence of Medical Therapy

- A. Therapeutic needle stick-marks on the right side of the neck and both antecubital fossae
- B. Defibrillator burn/abrasion on the central chest
- C. Fractures of the anterior right and left ribs (attempted resuscitation related)

VI. 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

AUTOPSY REPORT (b)(6)	
HAMID, Adnan N	

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VII. Identifying Body Marks: None noted

VIII. Toxicology

- A. No ethanol is detected in the blood and vitreous fluid.
- B. No screened drugs of abuse are detected in the blood.
- C. Lidocaine (a medication associated with resuscitation efforts) is present in the blood
- D. The carboxyhemoglobin saturation in the blood is less than 1%.
- E. No cyanide is detected in the blood.

OPINION

This 43-year-old Iraqi civilian detainee (b)(6) died of a pulmonary embolism. The source of the embolic thrombi were not identified, but based on the appearance of the emboli, they most likely originated from the deep veins of the leg (s). Failure to identify this site as the origin of the emboli by dissection of the legs does not preclude this conclusion. Severe hypertensive arteriosclerotic cardiovascular disease was also present, as demonstrated by increased heart weight, increased thickness of the left ventricle of the heart, atherosclerotic disease of the aorta and severe narrowing of all three major coronary arteries of the heart. The embolic infarction of the left kidney likely originated from the atherosclerotic disease present in the aorta. An enlarged spleen was also identified at autopsy. No evidence of physical abuse or physical restraint was identified at autopsy. Toxicological testing was negative for ethanol, screened drugs of abuse, elevated carboxyhemoglobin or cyanide in the blood. A medication associated with resuscitation (Lidocaine) was detected in the blood. The manner of death is natural.

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

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AUTOPSY EXAMINATION REPORT

Name: BTB Ibrahim, Ahmad Awwad

ISN: (b)(6)

Date of Birth: BTB (b)(6) 1987 Date of Death: (b)(6) 2009

Date/Time of Autopsy: 22 Jan 2009 @ 1000

Date of Report: 07 APR 2009

Autopsy No.: (b)(6)

AFIP No.: (b)(6)

Rank: Civilian Detainee Place of Death: Iraq

Place of Autopsy: Port Mortuary,

Dover AFB, DE

Circumstances of Death: This 21-year-old Iraqi Civilian was a detainee at Camp Bucca, Iraq when he reportedly awoke with shortness of breath and clutching his chest. He lost consciousness and was transported to the guard by other detainees. Medical personnel were dispatched and brought him to the medical facility where all resuscitative efforts were unsuccessful.

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

Identification: Presumptive identification is established by mortuary identification tags.

Fingerprints and a DNA sample are taken for comparison to an exemplar if one becomes available.

CAUSE OF DEATH:

Lymphocytic Myocarditis

MANNER OF DEATH:

Natural

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished unclad male. The body weighs 177 pounds, is 73 inches in length and appears compatible with the reported age of 21 years. The body is cold. Rigor is absent in all extremities. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure. There is slight marbling of the torso and both lower extremities.

The head is normocephalic, and the scalp hair is short black. Facial hair consists of black beard and moustache stubble. The irides are brown. The corneae are cloudy. The conjunctivae are congested. 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. There is a 3/8 x 1/8 inch dried abrasion on the left side of the forehead. On the left temple is a 3/4 x 1/2 inch abrasion. On the bridge of the nose is a 1/4 x 1/16 inch abrasion. The lips 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. There is a 4 x 3-inch patterned burn / abrasion on the right side of the chest. On the lateral left side of the chest is a 3-1/2 x 3-1/2 patterned burn / abrasion. The abdomen is flat without recent trauma. Healed surgical scars are not noted on the torso. The external genitalia are those of a circumcised adult male, and the pubic hair is in an appropriate distribution. There is mild folliculitis on the posterior torso and the anus is without note.

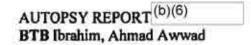
The extremities are symmetric and normally formed without evidence of significant recent trauma. There is a 2 x 1 inch contusion on the dorsal surface of the left hand. There are three abrasions each measuring 1/8 x 1/8-inch on the dorsal surface of the left hand. The fingernails are trimmed and intact. The toenails are unremarkable. A tattoo (b)(6)

CLOTHING AND PERSONAL EFFECTS

- Personal effects (contained in a green personal effects bag attached to the left wrist) are removed by Port Mortuary personnel prior to autopsy
- Accompanying the body are yellow boxer shorts (cut), yellow pants (cut), and yellow sweat pants (cut)

MEDICAL INTERVENTION

- EKG patch on the left lower quadrant of the abdomen
- · Multiple needle sticks on the chest, bilateral antecubital areas, and right inguinal area
- Interosseous catheter is noted in the anterior right leg
- Burn abrasions on the chest from the defibrillator pads



RADIOGRAPHS

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

- Multiple bilateral anterior rib fractures (CPR related)
- No skull, vertebral, or long bone fractures
- No metallic foreign bodies 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. There are bilateral pleural adhesions with areas of loculated clear fluid in the pleural space. There are adhesions between the diaphragm and the right lobe of the liver. There are no abnormal collections of fluid in the pericardial or peritoneal cavities. All body organs are present in normal anatomical position.

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. 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 1,436-grams and is fixed prior to further examination and submission for expert consultation. See Addendum A for complete details.

NECK:

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

CARDIOVASCULAR SYSTEM:

The 460-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. The heart is fixed prior to further examination and submission for expert consultation. See Addendum B for complete details.

The aorta is without 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, yellowtan and unremarkable. The parietal pleural surfaces have extensive adhesions bilaterally.

The right lung weighs 1,720-grams; the left 1,040-grams. The pulmonary parenchyma is diffusely congested and edematous, exuding copious amounts of blood and frothy fluid; no focal lesions are noted. The visceral pleural surfaces have extensive adhesions bilaterally.

The pulmonary arteries are normally developed, patent and without thrombus or embolus.

HEPATOBILIARY SYSTEM:

The 1,760-gram liver has an intact smooth capsule covering moderately congested tan-brown parenchyma with no focal lesions noted. There are adhesions over the right lobe of the liver extending to the diaphragm.

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

GASTROINTESTINAL SYSTEM:

The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 400-milliliters of brown granular 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 140-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 contains approximately 5-milliliters of cloudy yellow urine. The testes, prostate gland and seminal vesicles are without note.

LYMPHORETICULAR SYSTEM:

The thymus is small, fatty and otherwise unremarkable. The 280-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.

Page 5 of 11

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. Superficial incisions of each ankle and wrist region show no evidence of trauma or binding. No non-traumatic abnormalities of muscle or bone are identified.

SLIDE KEY AND MICROSCOPIC EXAMINATION

- Kidney Unremarkable glomeruli with post mortem autolysis of the tubules.
 Liver Normal hepatic architecture with congestion and mild chronic peri-portal inflammation.
 - Spleen Congestion with autolysis and no focal lesions.
- Lung (all five lobes) Pulmonary congestion with extravasated red blood cells in the alveolar spaces and pulmonary edema.

TOXICOLOGY

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

The blood is screened for medications and drugs of abuse including acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, mefloquine, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, salicylates, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

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

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

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

ADDITIONAL PROCEDURES

- Documentary photographs are taken by (b)(6)
 OAFME staff photographer.
- 2. Personal effects are released to the appropriate mortuary operations representatives.
- Specimens retained for toxicology testing and/or DNA identification are: vitreous fluid, blood, bile, gastric contents, heart, spleen, liver, lung, kidney, myocardium, adipose tissue and skeletal muscle.

BTB Ibrahim, Ahmad Awwad

- 4. The dissected organs are forwarded with body except for the heart and brain.
- 5. The heart is sent for Cardiovascular Pathology consultation.
- 6. The brain is sent for Neuropathology consultation.

FINAL AUTOPSY DIAGNOSES

- I. Cardiovascular System (see Addendum B)
 - A. Lymphocytic Myocarditis
 - B. Right ventricular dilatation, mild
- II. Natural diseases or pre-existing conditions identified:
 - A. Pulmonary congestion, edema, and adhesions
 - B. Hepatosplenomegaly
 - C. Cerebral edema
- III. Evidence of Medical Therapy:
 - A. EKG patch on left lower quadrant of the abdomen
 - B. Multiple therapeutic needle sticks
 - C. Interosseous catheter in the right anterior leg
 - D. Burn abrasions on the chest from the defibrillator pads
- IV. Post-Mortem Changes:
 - A. Rigor is absent in all extremities
 - B. Lividity is posterior and fixed except in areas exposed to pressure
 - C. There is marbling of the torso and both lower extremities
 - D. The body temperature is cold to touch
- V. Identifying Body Marks:
 - A. Tattog(b)(6)
- VI. There is no evidence of trauma or physical abuse.
- VII. Toxicology:
 - A. No ethanol was detected in the blood and vitreous fluid
 - B. Lidocaine is detected in the blood
 - C. No carbon monoxide was detected in the blood
 - D. No cyanide was detected in the blood

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OPINION

This 21-year-old, BTB (b)(6)	died of lymphocytic myocarditis. Per	
investigation(b)(6)	was found by other detainees complaining of shortness of	f breath
and clutching his chest. While t	he other detainees were bringing him to the guard he lost	
consciousness. Medical persons	nel were dispatched and took (b)(6) to the med	dical
around both his lungs as well as ventricular dilatation with histol	nts were unsuccessful. At autopsy, he had extensive adhesion on the right upper lobe of the liver. His heart showed mild ogical evidence of lymphocytic myocarditis. There is no every of the limited medical records available was non-contributed.	right ridence
	anol, carbon monoxide, cyanide, and illicit drugs of abuse as sen for medications was positive for lidocaine which if more	

Myocarditis is defined as inflammatory changes in the heart muscle and is characterized by myocyte (individual heart muscle cells) necrosis (death). The causes of myocarditis are numerous and can be roughly divided into infectious, toxic, and immunologic etiologies, with viral etiologies most common. Coxsackievirus B is the most common viral cause of myocarditis but other viruses implicated in causing myocarditis include influenza virus, echovirus, herpes simplex virus, hepatitis, Epstein-Barr virus, and cytomegalovirus. Nonviral infectious causes include diphtheria, Chagas disease, Streptococcal species, Staphylococcal species, Bartonella, Brucella, Leptospira, and Salmonella species. Toxic myocarditis can be caused by medications such as penicillin, doxorubicin, zidovudine (AZT) or environmental toxins such as lead, arsenic, and insect stings (scorpion or spiders). Immunologic etiologies of myocarditis encompass a number of clinical syndromes and include systemic lupus erthematosus, rheumatoid arthritis, scleroderma, Kawasaki disease, sarcoidosis, and giant cell arteritis. The decedent has no history of toxic exposure and there is no evidence of bacterial or systemic disease. The histological finding in this case of a lymphocytic infiltrate within the heart muscle is suggestive of a viral cause of his myocarditis.

The manner of death is Natural.

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

Baboonian C, Davies MJ, Booth JC, McKenna W: Coxsackie B viruses and human heart disease. Curr Top Microbiol Immunol 1997; 223:31-52.

Feldman AM, McNamara D: Myocarditis. N Engl J Med 2000; 343:1388-1398.

Weinstein C, Fenoglio JJ: Myocarditis. Hum Pathol 1987; 18:613-618.

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ADDENDUM A: Neuropathology Consultation Report

ARMED FORCES INSTITUTE OF PATHOLOGY

NEUROPATHOLOGY REPORT

CASE NUMBER: (b)(6)

PATIENT NAME (b)(6)

DATE OF EXAMINATION: 02/19/09

GROSS DESCRIPTION:

Brain weight: 1436 gm

The specimen consists of the brain of an adult.

The brain is diffusely swollen with widened gyri, narrowed sulci, effaced basilar cisterns, swollen cerebellar tonsils and an effaced cerebellomedullary cistern. Moderately deep tentorial grooves indent each uncus approximately 0.6 cm from the medial margins. There is no associated visible uncal cortical or cerebellar tonsil cortical injury.

The leptomeninges are thin, delicate and transparent. Except as noted, the cerebral gyri have normal configuration and consistency.

There is no sign of midline shift. Except as noted, 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 dissolution of the septum pellucidum due to edema and early autolysis. The demarcation between cerebral gray and white matter is blurred due to swelling and edema. There are 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 focal abnormalities. The substantia nigra and locus coeruleus are well pigmented.

The ventricular system and aqueduct of Sylvius are patent. The third ventricle is compressed due to brain swelling. The ventricular system is otherwise unremarkable with an anatomically normal 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 frontal lobe, (2) anterior corpus callosum/cingulate gyri/septum pellucidum, (3) right mid frontal lobe, (4) left uncus, (5) left insula/claustrum/putamen/globus pallidus/anterior limb of internal capsule, (6) left thalamus/substantia nigra/red nucleus/posterior limb of internal capsule, (7) right hippocampus/lateral geniculate nucleus/temporal horn of lateral ventricle/ choroid plexus, (8) mid corpus callosum/cingulate gyri/caudate nucleus/internal capsule, (9) right calcarine cortex/occipital horn of lateral ventricle, (10) cerebellum, (11) midbrain, (12) pons and (13) medulla.

Sections from each block are stained with H&E and LFB/Bodian techniques and immunostained for β -amyloid precursor protein (β -APP).

COMMENT:

Microscopic sections show diffuse edema and widespread eosinophilic neurons (acute ischemic neuronal injury) in the frontal, cingulate gyral, hippocampal (subiculum), occipital, and basal ganglia gray matter.

There is no evidence of inflammation or traum (b)(6)	a.
NEURODATHOLOGICT	
NEUROPATHOLOGIST	191

-Lymphocytic myocarditis

ADDENDUM B: Cardiovascular Pathology Consultation Report



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

AFIP Interdepartmental Consultation Report

٥	AFIP ACCESSIO	AFIP ACCESSION NO. SEQUENCE NO		
	(b)(6) (b)(6)	SSN: (b)(6)		
(b)(6)	February 17, 2009)		
AFIP (b)(6) 1413 Research Blvd. Bldg. 102				
Rockville, MD 20850				
DIAGNOSIS: (b)(6)	Heart, autopsy:			

-Mild right ventricular dilatation

History: 21 year old Iraqi male; height 185 cm, weight 80 kg; awoke with shortness of breath, collapsed, and could not be resuscitated; autopsy showed pleural adhesions

Heart: 460 g (per contributor) (predicted normal value 341 g, upper limit 481 g for 184 cm male); closed foramen ovale; mild right ventricular dilatation: left ventricular cavity diameter 27 mm, left ventricular free wall thickness 13 mm, anterior ventricular septum thickness 12 mm, posterior ventricular septum thickness 17 mm, right ventricular cavity diameter from acute angle to septum 43 mm, posterior right ventricle thickness 4 mm; valves grossly unremarkable; aortic root diameter 17 mm, pulmonary trunk diameter 15 mm; focal anterior and lateral left ventricular white discoloration; histologic sections demonstrate lymphocytic infiltrates primarily involving the subepicardial region of the left ventricle with patchy infiltrates in the subendocardial and mid myocardial regions and in the right ventricle with associated myocyte necrosis and healing areas with granulation tissue and fibrosis

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

	AFIP ACCESSION NO. SEOUENCE NO. (b)(6)		
	(b)(6) (b)(6)	SSN:	
	February 17, 2009		
ymphocytic myocarditis in the left ventric	le (left) with myocyt	necrosis (right)	
a copy of this report has been faxed to you	at (b)(6)		
	(b)(6)		
	Department	of Cardiovascular Patholo	σν