ARMED FORCES INSTITUTE OF PATHOLOGY
Office of the Armed Forces Medical Examiner
1413 Research Blvd., Bldg. 102
Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY EXAMINATION REPORT

Name: BTB Nahar, Muhammad
SSAN: N/A
Date of Birth: BTB 1933
Date of Death: (b)(6) 2004
Date of Autopsy: 04 OCT 2004
Date of Report: 24 NOV2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Iraqi National
Place of Death: Marine Detention Facility, Iraq
Place of Autopsy: Baghdad Mortuary Baghdad Airport, Iraq

Circumstances of Death: This believed to be 71 year old Iraqi National died while in US Marine Corps custody while being processed into the Iraqi detention program. The Naval Criminal Investigative Service (NCIS) investigation revealed that the decedent suffered from ulcer disease for several years (per decedent's nephew) and the decedent was doing quite poorly just prior to being detained by the Marines.

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

Identification: Identification based on prison identification tag on the left great toe.

CAUSE OF DEATH: Acute Peritonitis due to a Perforating Gastric Ulcer

MANNER OF DEATH: Natural

FINAL AUTOPSY DIAGNOSES:

I. Autopsy findings

A. Acute Peritonitis due to a Perforating Gastric Ulcer associated with 1500 ml of purulent ascites and severe dehydration.

B. Mild to moderate atherosclerosis (25-50% stenosis) of the right coronary and left anterior descending branch of the left coronary artery.

C. Mild atherosclerosis of the basilar and right middle cerebral arteries of the brain.

D. Fibrosis of the epicardial surface of the right ventricle of the heart.

E. Left renal scar.

F. Hydrocele of the right testicle.

II. Mild decomposition

III. Toxicology is negative for ethanol and drugs of abuse.

EXTERNAL EXAMINATION

The body is that of a cachetic, dehydrated 65 ½ inch tall, 100 pounds (estimated) Iraqi National whose appearance is consistent with the reported age of 71 years. Lividity is fixed posteriorly. Rigor is easily broken in the extremities, and the temperature is cold from refrigeration.

The scalp is covered with curly black and gray hair in a normal distribution. The irides are brown and the pupils are round and equal in diameter. There are linear drying artifacts on each eye and small hyperpigmented areas on the superior aspects of each eye. The external auditory canals are dry and free of abnormal secretions. The ears are unremarkable. The nares are patent and the lips are atraumatic. The nose and maxillae are palpably stable. The teeth appear are natural and have severe periodontal disease. Facial hair consists of a black mustache and goatee style beard.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. A 2.5 x 2.1 cm oval scar is on the left chest and a 7.4 x 1.4 cm oval scar is over the xiphoid process. The abdomen is flat but has a palpable fluid wave. A 2.1 x 0.7 cm oval scar is on the right upper quadrant. The genitalia are those of a normal adult circumcised male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The left buttock has a 2.0 x 1.5 cm abrasion over the protruding left femoral neck. On the right side of the central lower back is a 0.7 x 0.7 cm oval hyperpigmented area. The anus is unremarkable.

The upper and lower extremities are symmetric and without clubbing or edema. The skin of the posterior surfaces of the hands retains "tents" when stretched. On the posterior surface of the left forearm are five oval scars that range in size from 1.2 x 1.2 cm to 2.5 x 2.0 cm and are in a linear pattern extending from the elbow to the wrist. The wrists and web spaces of the fingers are free of injuries. On the anterior surface of the right lower leg are three round to oval scars that range in size from 1.5 x 1.0 cm to 2.5 x 1.5 cm. A 2.0 x 1.5 cm circular scar is on the anterior surface of the left lower leg. The ankles and web spaces of the toes are free of injuries. A paper identification tag inscribed with (b)(6) (b)(6) is attached to the left great toe.

CLOTHING AND PERSONAL EFFECTS

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

A bright orange jumpsuit with a piece of cardboard inscribed with (b)(6) in the front pocket.

MEDICAL INTERVENTION

There are a cluster of four punctate defects over the medial surface of the left forearm and a cluster of three punctate defects on the posterior surface of the right hand, inspection by incision is consistent with needle punctures.

RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates the following: No foreign bodies and no evidence of fractures.

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 2.1 x 0.1 cm crusted linear abrasion is on the anterior surface of the right wrist and a 2.5 x 0.1 cm crusted abrasion on the posterior surface of the right forearm.

A 1.5 x 0.5 cm crusted abrasion is on the anterior surface of the left ankle.

INTERNAL EXAMINATION

HEAD:
The galeal and subgaleal soft tissues of the scalp are free of injury. The calvarium is intact, as is the dura mater beneath it. Clear cerebrospinal fluid surrounds the soft 1390 gm brain, which has unremarkable gyri and sulci. Coronal sections demonstrate sharp demarcation between white and grey matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum, and arterial systems are free of injury. There is mild atherosclerosis of the basilar and right middle cerebral arteries. There are no skull fractures. The atlanto-occipital joint is stable.

NECK:
The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage. The thyroid cartilage and hyoid 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.

BODY CAVITIES:
The ribs, sternum, and vertebral bodies are visibly and palpably intact. The pleural cavities each have 100 ml of decomposition fluid. The pericardial and peritoneal cavities are free of fluid collections. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs weigh 423 and 438 gm, respectively. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:
The 341 gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. A 4.2 x 2.6 cm area of epicardial fibrosis is on the anterior surface of the right ventricle. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show mild

atherosclerosis (<25% stenosis) in the right coronary and the left descending branch of the left coronary artery. The myocardium is homogenous, red-brown. and firm. The valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.0 and 0.3-cm thick, respectively. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 780 gm liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains a minute amount of green-black bile and no stones. The gallbladder mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 94 gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

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

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

GENITOURINARY SYSTEM:
The right and left kidneys weigh 65 and 64 gm, respectively. The external surfaces have fine granularity. A 1.0 x 0.8 cm scar that is consistent with a ruptured renal cortical cyst is on the upper pole of the left kidney. 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 40 ml of cloudy yellow urine. The prostate is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities. The right testicle has a hydrocele that contains 30 ml of clear yellow fluid.

GASTROINTESTINAL TRACT:
The esophagus is intact and lined by smooth, grey-white mucosa. There is approximately 10 ml of clotted blood in the distal esophagus. The stomach contains approximately 120 ml of tan mucoid fluid. The anterior gastric wall has a 1.6 x 1.0 cm perforation near the pyloric sphincter that communicates with a 1.5 x 0.5 cm perforation of the posterior gastric wall near the pyloric sphincter. There is approximately 1500 ml of foul smelling cloudy tan fluid in the peritoneal cavity. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

ADDITIONAL PROCEDURES

- Documentary photographs are taken by (b)(6)
- Specimens retained for toxicologic testing and/or DNA identification are: blood, urine, spleen, kidney, lung, liver, brain, bile, gastric contents, and psoas muscle.
- The dissected organs are forwarded with body.
- Personal effects are released to the appropriate mortuary operations representatives.

MICROSCOPIC EXAMINATION

Stomach: Acute ulceration with severe inflammation with bacteria present. Helicobacter pylori is not identified on either H&E or Diff-Quik stained slides

Portions of other organs are retained in formalin, without preparation of histologic slides.

OPINION

This believed to be 71 year old detainee died from acute peritonitis that resulted from a perforating gastric ulcer. The decedent was cachetic and severely dehydrated which indicates that he had the ulcer for a significant amount of time. The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

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

REPLY TO ATTENTION OF

AFIP (b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION

AFIP Accessions Number **Sequence**
(b)(6)

Name
NAHAR, MUHAMMAD

SSAN: **Autopsy:** (b)(6)
Toxicology Accession #: (b)(6)
Date Report Generated: October 18, 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS **REPORT OF TOXICOLOGICAL EXAMINATION**

Condition of Specimens: GOOD
Date of Incident: **Date Received:** 10/6/2004

VOLATILES: The **URINE AND LIVER** were examined for the presence of ethanol at a cutoff of 20 mg/dL. No ethanol was detected.

DRUGS: The **LIVER** was screened for amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

None were found.

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FINAL AUTOPSY REPORT

Name: Mohammad, Sher
SSAN: n/a
Date of Birth: unknown
Date of Death: (b)(6) 2004
Date of Autopsy: 30 September 2004
Date of Report: 14 April 2005

Autopsy No.: (b)(6)
AFIP No (b)(6)
Rank: Civilian
Place of Death: Salerno, Afghanistan
Place of Autopsy: Bagram, Afghanistan

Circumstances of Death: This adult male civilian, presumed Afghanistan national, was found dead while at the Regional Interrogation Facility, Salerno Firebase, Afghanistan. By report, he in processed at the RIF on (b)(6) 2004, and the following day, he complained of various cold symptoms and body aches related to a snake or insect bite. On examination by medical personnel, his vital signs were normal. Several hours later, he was found to be unresponsive and not breathing, and he was pronounced dead at the local medical facility.

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

Identification: Visual, per detention facility records; postmortem fingerprints and DNA profile obtained

CAUSE OF DEATH: Atherosclerotic Cardiovascular Disease

MANNER OF DEATH: Natural

FINAL AUTOPSY DIAGNOSES:

I. Atherosclerotic cardiovascular disease (AFIP Cardiovascular Pathology consultation)
   a. Moderate coronary atherosclerosis
      i. Left main coronary artery: 40% luminal narrowing by pathologic intimal thickening
      ii. Left anterior descending artery (LAD): 50% narrowing of proximal LAD by pathologic intimal thickening
      iii. Left circumflex artery (LCA): 20% narrowing of proximal LCA
      iv. Right coronary artery (RCA)
         1. 20% narrowing of proximal RCA
         2. 70% narrowing of mid RCA by smooth muscle and proteoglycan rich neointima, consistent with healed plaque erosion
   b. Cardiomegaly with left ventricular hypertrophy
      i. Heart, 470 gm (predicted normal value 343 gm, upper limit 453 gm)
      ii. Left ventricular free wall thickness, 15 mm
      iii. Ventricular septum thickness, 15 mm

II. Evidence of restraint
   a. White plastic zip-tie "Flexicuff" around right wrist with no underlying contusion or abrasion

III. Evidence of injury
   a. Minor abrasions of chest, upper back, upper arms, and right knee
   b. No internal evidence of trauma

IV. Additional findings
   a. Neuropathology consultation (AFIP Department of Neuropathology)
      i. No gross abnormalities, brain 1370 gm
      ii. Microscopically, minimal non-specific findings
         1. Two small foci of chronic inflammatory cells in the medulla; immunohistochemically, rare scattered lymphocytes
         2. No microorganisms or viral inclusions identified
   b. Globoid liver with rounded borders, 1660 gm
      i. Hepatic pathology consultation, AFIP
         1. Moderate vascular congestion
         2. Mild "dusting" of hepatocytes with hemosiderin
         3. No specific lesions identified
   c. Pulmonary edema and congestion; right lung 764 gm, left lung 614 gm
   d. Simple renal cysts

V. Toxicology (AFIP)
   a. Volatiles: Blood and vitreous fluid negative for ethanol
   b. Drugs: Urine negative for screened medications and drugs of abuse

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished unclad Caucasian male. On top of the body, there is a pair of tan, drawstring waist pants and a previously cut white sleeveless undershirt. The body weighs approximately 180 pounds, is 67" in height and appears approximately 40-60 years of age. The body temperature is cold, that of the refrigeration unit. 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, and there is moderate facial congestion.

The scalp is covered with dark brown hair averaging 4 cm in length with a slightly receding hairline in the temporal regions. Facial hair consists of a dark mustache and dark full beard. The irides are brown, and the corneae are slightly cloudy. The sclerae and conjunctivae are congested, but free of petechiae. The earlobes are not pierced. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal skeleton is 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 and well developed. No injury of the ribs or sternum is evident externally. The abdomen is slightly protuberant and soft. Healed surgical scars of the abdomen are not noted. The extremities are well developed with normal range of motion. The fingernails are intact. The soles of the feet are calloused and lightly dirt stained. There is a thick callous on the anterior aspect of the left ankle, and the skin of the left knee is thickened and hyperkeratotic. There is a 3 x 0.1 cm pale linear scar on the back of the right forearm, and there are multiple pale scars on the back of the right hand, < 0.2 cm each. There is a 1 x 1 cm scar on the lateral aspect of the right ankle. Tattoos are not noted, and needle tracks are not observed. The external genitalia are those of a normal adult uncircumcised male. The testes are descended and free of masses. The pubic hair is present in a normal distribution. The buttocks and anus are unremarkable.

EVIDENCE OF THERAPY

There is a needle puncture mark of the right lower aspect of the neck, just above the clavicle, covered with a piece of white tape and gauze, and there is underlying associated soft tissue hemorrhage. There is no other evidence of medical intervention.

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.

There is a white plastic zip-tie strap around the right wrist, and there is blood coming from the right external auditory canal.

There is a 2 x 0.1 cm linear abrasion on the lower right side of the chest, and there is a healing 4 x 0.2 cm linear abrasion of the upper left side of the back. There is a 2.5 x 0.1 cm abrasion on the lateral aspect of the upper left arm, and there is a 3 x 0.1 cm healing abrasion on the medial aspect of the right elbow. There is a 2 x 1 cm abrasion on the lateral aspect of the right knee.

On internal examination of the head, chest and abdomen, there is no evidence of injury.

INTERNAL EXAMINATION

BODY CAVITIES:
The body is opened by the usual thoraco-abdominal incision and the chest plate is removed. No adhesions or abnormal collections of fluid are present in any of the body cavities. All body organs are present in the normal anatomical position. The vertebral bodies are visibly and palpably intact. The subcutaneous fat layer of the abdominal wall is 3 cm thick. There is no internal evidence of blunt force or penetrating injury to the thoraco-abdominal region.

HEAD: (CENTRAL NERVOUS SYSTEM)
The scalp is reflected, and there is no subgaleal hemorrhage or skull fractures found. The calvarium of the skull is removed. The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage present. The leptomeninges are thin and delicate. The cerebrospinal fluid is clear. 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 revealed no lesions, and there is no evidence of infection, tumor, or trauma. The ventricles are of normal size. Transverse sections through the brain stem and cerebellum are unremarkable. The dura is stripped from the basilar skull, and no fractures are found. The atlanto-occipital joint is stable. The brain weighs 1370 grams. See "Neuropathology Report" below.

NECK:
Examination of the soft tissues of the neck, including strap muscles, thyroid gland and large vessels, reveals no abnormalities. 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 and is unobstructed. The thyroid gland is symmetric and red-brown, without cystic or nodular change. There is no evidence of infection, tumor, or trauma, and the airway is patent. Incision and dissection of the posterior neck demonstrates no deep paracervical muscular injury, hemorrhage, or fractures of the dorsal spinous processes.

CARDIOVASCULAR SYSTEM:
The pericardial surfaces are smooth, glistening and unremarkable; the pericardial sac is free of significant fluid and adhesions. A moderate amount of epicardial fat is present. The

coronary arteries arise normally in a right dominant pattern and follow the usual distribution. The chambers and valves exhibit the usual size-position relationship and are unremarkable. The myocardium is dark red-brown, firm and unremarkable; the atrial and ventricular septa are intact. The left ventricle is 1.5 cm in thickness and the right ventricle is 0.4 cm in thickness. 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 470 grams. See "Cardiovascular Pathology Report" below.

RESPIRATORY SYSTEM:
The upper airway is clear of debris and foreign material; the mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces are smooth, glistening and unremarkable bilaterally. The pulmonary parenchyma is red-purple, exuding a moderate amount of bloody fluid; no focal lesions are noted. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 764 grams; the left 614 grams.

LIVER & BILIARY SYSTEM:
The liver is globoid with very rounded margins. The hepatic capsule is smooth, glistening and intact, covering dark red-brown, moderately congested and slightly firm parenchyma with no focal lesions noted. The gallbladder contains 8 ml of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi. The liver weighs 1660 grams.

ALIMENTARY TRACT:
The tongue is free of bite marks, hemorrhage, or other injuries. The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 20 ml of fluid. The small and large bowel are unremarkable. The pancreas has a normal pink-tan lobulated appearance and the ducts are clear. The appendix is present and is 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. There are multiple smooth walled simple cysts, up to 1 cm in diameter. The calyces, pelves and ureters are otherwise unremarkable. White bladder mucosa overlies an intact bladder wall. The urinary bladder contains 30 ml of clear, yellow urine. The prostate gland is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities. The right kidney weighs 170 grams; the left 148 grams.

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 225 grams.

ENDOCRINE SYSTEM:
The pituitary, thyroid and adrenal glands are unremarkable.

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

MICROSCOPIC EXAMINATION

HEART: See "Cardiovascular Pathology Report" below.

LUNGS: The alveolar spaces and small air passages are expanded with focal edema fluid, but no significant inflammatory component. The alveolar walls are thin and moderately congested. The arterial and venous vascular systems are normal. The peribronchial lymphatics are unremarkable.

LIVER: See "Hepatic Pathology Report" below.

SPLEEN: The capsule and white pulp are unremarkable. There is minimal congestion of the red pulp.

ADRENALS: The cortical zones are distinctive, and the medullae are not remarkable.

KIDNEYS: The subcapsular zones are unremarkable. The glomeruli are mildly congested without cellular proliferation, mesangial prominence, or sclerosis. The tubules are well preserved. There is no interstitial fibrosis or significant inflammation. There is no thickening of the walls of the arterioles or small arterial channels. The transitional epithelium of the collecting system is normal.

BRAIN: Multiple sections of brain demonstrate an unremarkable configuration of gray and white matter which is appropriate for age. There is no evidence of atrophy, inflammation, hemorrhage, or neoplasm. See "Neuropathology Report" below.

CARDIOVASCULAR PATHOLOGY REPORT

Department of Cardiovascular Pathology, AFIP:

"AFIP DIAGNOSIS: (b)(6) Moderate coronary atherosclerosis, mid right coronary artery; cardiomegaly with left ventricular hypertrophy

History: 40-50 year old Afghani male detainee, 67", 170 lbs, found dead in US custody

Heart: 475 grams (predicted normal value 343 grams, upper limit 453 grams for a 170 lbs man); normal epicardial fat; closed foramen ovale; normal cardiac chamber dimensions: left ventricular cavity diameter 30 mm, left ventricular free wall thickness 15 mm, ventricular septum thickness 15 mm; right ventricle thickness 4 mm, without gross scars or abnormal fat infiltrates; fenestrated aortic valve leaflets, otherwise unremarkable

valves and endocardium; no gross myocardial fibrosis or necrosis; histologic sections show mild left ventricular myocyte hypertrophy, otherwise unremarkable

Coronary arteries: Normal ostia; right dominance; moderate atherosclerosis:

Left main coronary artery: 40% luminal narrowing by pathologic intimal thickening

Left anterior descending artery (LAD): 50% narrowing of proximal LAD by pathologic intimal thickening, no other significant narrowing

Left circumflex artery (LCA): 20% narrowing of proximal LCA, no other significant narrowing

Right coronary artery (RCA): 20% narrowing of proximal RCA, 70% narrowing of mid RCA by smooth muscle and proteoglycan rich neointima, consistent with healed plaque erosion; distal RCA and posterior descending artery open."

NEUROPATHOLOGY REPORT

Department of Neuropathology and Ophthalmic Pathology, AFIP:

"This case was reviewed in conference on 7 Apr 05. It was also seen in consultation with the Departments of Infectious and Parasitic Diseases Pathology.

Multiple irregular sections of formalin-fixed brain, 15 x 14 x 1.5 cm in aggregate, and a 4 x 3 cm fragment of grossly unremarkable dura were submitted for review. No significant gross abnormalities were identified in the submitted sections.

Summary of microscopic sections: 1. Basal ganglia. 2. Inferior temporal gyrus. 3. Cingulate gyrus. 4. Thalamus, hypothalamus, and substania nigra. 5. Cerebral cortex. 6. Pons. 7. Medulla. 8. Cerebellum.

The tissue was processed in paraffin; a section prepared from each paraffin block was stained with H&E. Additional sections prepared from selected paraffin blocks were stained with amyloid precursor protein, CD45RB, and CD68.

Microscopic sections of the medulla show two small foci of chronic inflammatory cells. Immunohistochemical staining for CD45RB highlight rare scattered lymphocytes in the medulla. Occasional vessels with widened perivascular spaces containing a few hemosiderin-laden macrophages are also noted. No microorganisms or viral inclusions are identified. These features are minimal and non-specific."

HEPATIC PATHOLOGY REPORT

Department of Hepatic Pathology, AFIP:

"There is moderate vascular congestion. No other specific lesion is identified except for mild "dusting" of hepatocytes with hemosiderin. Cause of death cannot be determined in this section of liver."

ADDITIONAL PROCEDURES

- Documentary photographs are taken by OAFME photographers
- Specimens retained for toxicologic testing and/or DNA identification are: vitreous fluid, heart blood, urine, and bile
- The dissected organs are forwarded with the body
- Personal effects are released to the appropriate mortuary operations representative

OPINION

This adult male Afghanistan detainee died in US custody of atherosclerotic cardiovascular disease, with moderate coronary artery atherosclerosis (70% occlusion of right coronary artery; three vessel disease) and cardiomegaly (enlarged heart, 470 gm) with left ventricular hypertrophy. He also has an unusual, globoid shaped liver; however, no evidence of any chronic or active liver disease was found microscopically. He has evidence of restraint ("flexicuffs" around the right wrist); however, there is no evidence of significant trauma to explain the death.

The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

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

REPLY TO ATTENTION OF

AFIP: (b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION
AFIP Accessions Number Sequence (b)(6)
Name SHER, MOHAMMAD
SSAN: **Autopsy:** (b)(6)
Toxicology Accession #: (b)(6)
Date Report Generated: October 15, 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS **REPORT OF TOXICOLOGICAL EXAMINATION**

Condition of Specimens: GOOD
Date of Incident: **Date Received:** 10/4/2004

VOLATILES: The **BLOOD AND VITREOUS FLUID** were examined for the presence of ethanol at a cutoff of 20 mg/dL. No ethanol was detected.

DRUGS: The **URINE** was screened for amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, cocaine, dextromethorphan, lidocaine, lysergic acid diethylamide, narcotic analgesics, opiates, phencyclidine, phenothiazines, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

None were found.

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Office of the Armed Forces Medical Examiner
1413 Research Blvd., Bldg. 102
Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY EXAMINATION REPORT

Name: BTB Abrahemy, Hasan Flah Hamed Hame
SSAN: ISN (b)(6)
Date of Birth: BTB 1977
Date of Death: (b)(6) 2004
Date of Autopsy: 04 OCT 2004
Date of Report: 04 NOV 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Iraqi National
Place of Death: Abu Gharib Prison
Place of Autopsy: Baghdad Mortuary
Baghdad Airport, Iraq

Circumstances of Death: This believed to be 27 year old Iraqi National was a detainee in the Abu Gharib Prison, Iraq, that died of a perforating ballistic injury of the torso he sustained while in the prison yard. The decedent was witnessed to suddenly collapse while with a group of detainees and was found to have a possible gunshot wound of the chest. CID investigation indicated victim was injured when a gunfight occurred outside the prison and the decedent was hit with shrapnel from this fight. The suspected shrapnel was recovered on the ground near the decedent. Despite an emergent thoracotomy, the decedent died of his injury.

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

Identification: Identification is established by visual inspection of prison records.

CAUSE OF DEATH: Perforating Ballistic Injury of the Torso

MANNER OF DEATH: Homicide

FINAL AUTOPSY DIAGNOSES:

I. Perforating Ballistic Injury of the Torso

A. Injuries of the Torso
1. Probable entry injury is incorporated into thoracotomy incision and is identified as a 1.0 cm area of irregularity along the incision near the xiphoid process that is 18 inches below the top of the head (19 inches when re-approximated) and in the anterior midline. An oval defect is in the right sixth and seventh costal cartilages, beneath the skin irregularity.
2. A 1.0 x 1.0 cm shored exit wound that has a triangular skin tag at 5 o'clock and a 3.5 x 1.4 cm rectangular abrasion

surrounding the defect, is 22 ½ inches below the top of the head and 2 inches right of the posterior midline.

3. Projectile path: Perforation of the skin and muscle immediately right of the xiphoid process at the right sixth costal cartilage, the left lobe of the liver, the intrahepatic portion of the inferior vena cava, the head of the pancreas, the right adrenal gland, the right renal vein, a superior branch of the right renal artery, the upper pole of the right kidney, the posterior aspect of the right leaflet of the diaphragm, the right twelfth rib and the lateral portion of the body of the first lumbar vertebra and perforation of the muscle and skin of the mid-right back.
4. Projectile direction: Front to back, left to right and slightly down.
5. Associated findings: Bilateral hemothorax (approximately 500 ml right and 200 ml left); hemoperitoneum (approximately 50 ml surrounding spleen)
6. Trace evidence recovered: None

B. Penetrating Injury of the Left Lower Leg
   1. A 0.7 x 0.3 cm crusted superficial penetrating injury of the lateral surface of the left lower leg into the skin only.
   2. Trace evidence recovered: small gray-black metallic fragment.

C. Other injuries
   1. Four recent (days) superficial incised wounds of the left forearm.

II. Medical Intervention
   1. Thoracotomy incision of the bilateral fifth intercostal spaces and sternum.
   2. Chest tube insertion site in the left 7th intercostal space.
   3. Needle puncture wound with surrounding ecchymosis on the left side of the neck.
   4. Needle puncture marks over the veins of the anterior surface of the right arm.
   5. Right femoral triangle puncture site with remaining suture material in the skin.

III. No significant natural diseases identified, within limitations of the examination.

IV. Identifying marks
   1. (b)(6) tattoo (b)(6)
   2. tattoo
   3. tattoo

4. (b)(6) (b)(6) **tattoo** (b)(6)
5. (b)(6) (b)(6) **tattoo** (b)(6)
6. **Multiple linear scars on the left upper extremity, the chest, and the abdomen.**

V. **Toxicology is negative for ethanol. Diazepam (0.05 mg/L) and Nordiazepam (0.06 mg/L) are present in the chest blood.**

EXTERNAL EXAMINATION

The body is that of a well-developed, thin appearing 68 inch long, 130 pounds (estimated) Iraqi male whose appearance is consistent with the reported age of approximately 27 years. Lividity is fixed posteriorly with pressure bearing area pallor. Rigor is easily broken in the extremities, and the temperature is cold from refrigeration.

The scalp is covered with black curly hair in a normal distribution. The irides are brown, and the pupils are round and equal in diameter. The external auditory canals are dry. The ears are unremarkable. The nares are patent and the lips are atraumatic. The nose and maxillae are palpably stable. The teeth appear natural and in good repair. The facial hair consists of a goatee style beard and mustache.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. There are injuries of the chest that are listed below. The abdomen is flat. The genitalia are those of a normal adult circumcised male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric and without clubbing or edema.

There are multiple linear scars of various lengths on the chest, abdomen and posterior lateral surface of the left arm, (b)(6) tattoo (b)(6)
(b)(6) tattoo (b)(6)
(b)(6) tattoo (b)(6)
tattoo (b)(6) tattoo (b)(6)
(b)(6)

CLOTHING AND PERSONAL EFFECTS

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

A blood soaked dark colored t-shirt is in the body bag.

MEDICAL INTERVENTION

A non-sutured thoractomy incision of the fifth intercostal space begins on the left flank and traverses the sternum and terminates on the right chest, the pericardium is surgically opened, a puncture mark surrounded by an 8 x 8 cm ecchymosis is over the left jugular vein, a chest tube site is in the left seventh intercostal space, four (4) puncture marks are on the anterior surface of the right upper arm, and a puncture mark is in the right femoral triangle and is associated with suture material.

RADIOGRAPHS

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

A metallic fragment in the left leg; no long bone fractures; and no other foreign bodies.

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.

I. Perforating Ballistic Injury of the Torso

A. Injuries of the Torso

1. Probable entry injury is incorporated into the thoracotomy incision and is identified as a 1.0 cm area of irregularity along the incision near the xiphoid process that is 18 inches below the top of the head (19 inches when re-approximated) and in the anterior midline. An oval defect is in the right sixth and seventh costal cartilage, beneath the skin irregularity.
2. A 1.0 x 1.0 cm shored exit wound that has a triangular skin tag at 5 o'clock and a 3.5 x 1.4 cm rectangular abrasion surrounding the defect, is 22 ½ inches below the top of the head and 2 inches right of the posterior midline.
3. Projectile path: Perforation of the skin and muscle immediately right of the xiphoid process at the right sixth costal cartilage, the left lobe of the liver, the intrahepatic portion of the inferior vena cava, the head of the pancreas, the right adrenal gland, the right renal vein, a superior branch of the right renal artery, the upper pole of the right kidney, the posterior aspect of the right leaflet of the diaphragm, the right twelfth rib and the lateral portion of the body of the first lumbar vertebra and perforation of the muscle and skin of the mid-right back.
4. Projectile direction: Front to back, left to right and slightly down.
5. Associated findings: Bilateral hemothorax (approximately 500 ml right and 200 ml left); hemoperitoneum (approximately 50 ml surrounding spleen)
6. Trace evidence recovered: None

B. Penetrating Injury of the Left Lower Leg

1. A 0.7 x 0.3 cm crusted superficial penetrating injury of the lateral surface of the left lower leg into the skin only.
2. Trace evidence recovered: small gray-black metallic fragment.

C. Other injuries

1. Four recent (days) superficial incised wounds of the left forearm.

INTERNAL EXAMINATION

HEAD:
The galeal and subgaleal soft tissues of the scalp are free of injury. The calvarium is intact, as is the dura mater beneath it. Clear cerebrospinal fluid surrounds the 1180 gm brain, which has unremarkable gyri and sulci. Coronal sections demonstrate sharp demarcation between white and grey matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum, and arterial systems are free of injury or other abnormalities. There are no skull fractures. The atlanto-occipital joint is stable.

NECK:
The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage. The thyroid cartilage is intact. The hyoid bone is fractured but not associated with any surrounding ecchymosis. The larynx is lined by intact white mucosa. The thyroid is symmetric and red-brown, without cystic or nodular change. The tongue is free of bite marks, hemorrhage, or other injuries.

BODY CAVITIES:
The ribs (except where noted above) and the vertebral bodies are visibly and palpably intact. There are approximately 200 ml of blood in the left pleural cavity and 500 ml of blood in the right pleural cavity. Approximately 50 ml of blood surrounds the spleen. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs weigh 250 and 274 gm, respectively. The lungs are atelectatic. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:
The 288 gm heart is contained in a surgically opened pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show no atherosclerosis. The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.2 and 0.2-cm thick, respectively. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels. The aorta has mild atheromatous streaking. The renal (except where noted above) and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 1375 gm liver has the injuries described. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains a minute amount of green-black bile and no stones. The gallbladder mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 107gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

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

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

GENITOURINARY SYSTEM:
The right and left kidneys weigh 95 and 94-gm, respectively. The external surfaces are intact and smooth. The cut surfaces are red-tan and congested, with uniformly thick cortices and sharp corticomedullary junctions. The pelves are unremarkable and the ureters are normal in course and caliber. White bladder mucosa overlies an intact bladder wall. The bladder contains approximately 50 ml of cloudy red/yellow urine. The prostate is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

GASTROINTESTINAL TRACT:
The esophagus is intact and lined by smooth, grey-white mucosa. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

ADDITIONAL PROCEDURES

- Documentary photographs are taken by (b)(6)
- Specimens retained for toxicologic testing and/or DNA identification are: blood, urine, vitreous fluid, spleen, kidney, liver, brain, lung, bile, gastric contents, and psoas muscle.
- The dissected organs are forwarded with body.
- Personal effects are released to the appropriate mortuary operations representatives.

MICROSCOPIC EXAMINATION

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

OPINION

This believed to be 27 year old Iraqi National was a detainee in the Abu Gharib Prison, Iraq, that died of a perforating ballistic injury of the torso he sustained while in the prison yard. A foreign body from a gunfight that was occurring outside the prison walls hit the decedent. The diazepam and nordiazepam found in the chest blood are of undetermined origin. The manner of death is homicide.

(b)(6)

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

ARMED FORCES INSTITUTE OF PATHOLOGY
Office of the Armed Forces Medical Examiner
1413 Research Blvd., Bldg. 102
Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY EXAMINATION REPORT

Name: Habib, Fras M.
SSAN: Detainee Number (b)(6)
Date of Birth: Unknown
Date of Death: (b)(6) 2004
Date of Autopsy: 30 AUG 2004
Date of Report: 12 OCT 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Detainee in U.S. Custody
Place of Death: Iraq
Place of Autopsy: BIAP Mortuary, Baghdad, Iraq

Circumstances of Death: This Iraqi male was a detainee in U.S. custody at Abu Ghraib prison in Baghdad, Iraq. A group of prisoners became unruly and the guards used lethal force to subdue the crowd. A shotgun was fired and this detainee was struck and killed.

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

Identification: Circumstantial identity is established by paperwork accompanying the detainee and his designation as detainee number (b)(6)

CAUSE OF DEATH: Shotgun Wound of the Chest

MANNER OF DEATH: Homicide

FINAL AUTOPSY DIAGNOSES:

I. Shotgun Wounds of the Torso and Both Arms

A. Penetrating Shotgun Wound of the Chest
1. **Entrance: Left side of the back; no evidence of close-range discharge of a firearm on the surrounding skin**
2. **Wound Path: Skin, subcutaneous tissue, and muscle of the left back, posterior left 9th rib (with fracture), lower lobe of left lung, left atrium, right atrium, upper lobe of the right lung, intercostal space below the anterior aspect of the right 2nd rib, muscle and subcutaneous tissue of the right upper chest**
3. **Recovered: Deformed metallic foreign body located in the subcutaneous tissue of the right upper chest**
4. **Wound Direction: Left to right, back to front, and upward**
5. **Associated Injuries: Bilateral hemothoraces (right 1400-milliliters; left 2100-milliliters), hemopericardium (50-milliliters)**

B. Perforating Shotgun Wound of the Right Upper Back
1. **Entrance: Right upper back; no evidence of close-range discharge of a firearm on the surrounding skin**
2. **Wound Path: Skin and subcutaneous tissue of the right upper back (tangential wound path)**
3. **Exit: Right upper back; no projectile recovered**
4. **Wound Direction: Left to right and slightly upward**

C. Perforating Shotgun Wound of the Right Arm
1. **Entrance: Posterior right arm; no evidence of close-range discharge of a firearm on the surrounding skin**
2. **Wound Path: Skin, subcutaneous tissue, and muscle of the posterior right arm; muscle, subcutaneous tissue, and skin of the anterior right arm**
3. **Exit: Anterior right arm; no projectile recovered**
4. **Wound Direction: Left to right and back to front (with the body in anatomic position)**

D. Perforating Shotgun Wound of the Left Arm
1. **Entrance: Posterior left arm; no evidence of close-range discharge of a firearm on the surrounding skin**
2. **Wound Path: Skin, subcutaneous tissue, and muscle of the posterior left arm; muscle, subcutaneous tissue, and skin of the anterior left arm**
3. **Exit: Anterior left arm; no projectile recovered**
4. **Wound Direction: Left to right, back to front, and downward (with the body in anatomic position)**

II. No evidence of significant natural disease processes, within the limitations of the examination

III. Changes of early to moderate decomposition

IV. The recovered projectile is placed in a labeled container and turned over to the investigating agent who was present at the autopsy

V. Toxicology is negative for ethanol and drugs of abuse

EXTERNAL EXAMINATION

The remains are received clad in a cut away green shirt and white, boxer type shorts. No identification band is noted on the body, but the sequence of numbers (b)(6) is written on the lower chest left of the anterior midline. The body is in an early to moderate state of decomposition, with changes that include clouding of the corneae, loss of turgor of the globes of the eyes, marbling of the soft tissue, and generalized skin slippage. Bloody fluid is present in the oral cavity.

The body is that of a well-developed, well-nourished appearing, 70 ½-inches, 180-pounds (estimated), White male. The age of the individual is unknown. Lividity is posterior and fixed, except in areas exposed to pressure. Rigor has passed. The body temperature is that of the refrigeration unit.

The scalp is covered with medium length, black hair in a normal distribution. Facial hair consists of a black beard. The irides are brown and the pupils are round and equal in diameter. The external ears are unremarkable. The nose and maxillae are palpably stable. The teeth are natural and in fair condition.

The neck is mobile and the trachea is midline. The chest is symmetric. The abdomen is flat. The external genitalia are those of a normal adult, circumcised, male. Both testes are descended into the scrotum. Pubic hair is present in a normal distribution. There is no evidence of external trauma to the urogenital area. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric and without clubbing or edema. The fingernails are intact. No tattoos or other significant identifying body marks are noted.

EVIDENCE OF MEDICAL INTERVENTION

- Electrocardiogram monitoring pads on both sides of the upper chest and on the left lower quadrant of the abdomen
- Gauze dressing is tied around the wrists and feet

RADIOGRAPHS

Full body radiographs are obtained and show a metallic foreign body on the right side of the upper torso.

EVIDENCE OF INJURY

I. Shotgun Wounds of the Torso and Both Arms

A. Penetrating Shotgun Wound of the Chest

There is an entrance shotgun wound on the left side of the back, situated 18-inches below the top of the head and 3 ½-inches left of the posterior midline. No soot deposition or gunpowder stippling is present on the surrounding skin. The 3/16-inch wound has a 1/8-inch marginal abrasion between 5 and 8 o'clock. The wound path goes through the skin, subcutaneous tissue, and muscle of the left side

of the back and enters the pleural cavity through the posterior aspect of the left 9th rib, which is fractured. The path then continues through the lower lobe of the left lung, the pericardium, both atria of the heart, the pericardium, and the upper lobe of the right lung. The wound path then exits the right pleural cavity below the anterior aspect of the right 2nd rib and perforates the chest wall musculature. A deformed, metallic projectile is recovered from the subcutaneous tissue of the right upper chest. The projectile is placed in a labeled container and turned over to the investigating USACID agent. Injuries associated with the wound path include bilateral hemothoraces (right 1400 milliliters; left 2100-milliliters) and hemopericardium (50-milliliters). The direction of the wound path is left to right, back to front, and upward.

B. Perforating Shotgun Wound of the Right Upper Back

There is an entrance shotgun wound on the right upper back, situated 16-inches below the top of the head and 7 1/8-inches right of the posterior midline of the body. The 5/16-inch wound has a ½ x 5/8-inch eccentric marginal abrasion between 6 and 12 o'clock. No soot deposition or gunpowder stippling is present on the surrounding skin. The wound path goes through skin and subcutaneous tissue prior to exiting the body through a ¼-inch skin defect situated 15-inches below the top of the head and 8-inches right of the posterior midline. A ¼ x ¼-inch eccentric marginal abrasion is present between 12 and 6 o'clock. No bullet or bullet fragments are recovered. The direction of the wound path is left to right and slightly upward.

C. Perforating Shotgun Wound of the Right Arm

There is an entrance shotgun wound on the posterior aspect of the right arm, situated 6-inches below the top of the right shoulder and 2-inches medial of the posterior midline of the right arm. The 1/4-inch, irregular, defect is surrounded by a minimal ring of contusion. No soot deposition or gunpowder stippling is present on the surrounding skin. The wound path goes through the skin, subcutaneous tissue, and muscle of the posterior right arm and the muscle, subcutaneous tissue, and skin of the anterior right arm. A ¼-inch exit wound within a 1 ½ x 1-inch area of contusion is situated 6-inches below the top of the right shoulder and 1 ¾-inches lateral to the anterior midline of the right arm. No bullet or bullet fragments are recovered. The direction of the wound path is left to right and back to front.

D. Perforating Shotgun Wound of the Left Arm

There is an entrance shotgun wound on the posterior aspect of the left arm, situated 5-inches below the top of the left shoulder and 2-inches medial to the posterior midline of the left arm. The 1/4-inch, irregular, ovoid defect has no associated abrasion or contusion. No soot deposition or gunpowder stippling is present on the surrounding skin. The wound path goes through the skin, subcutaneous tissue, and muscle of the posterior left arm and the muscle, subcutaneous tissue, and skin of the anterior left arm. A ¼-inch exit wound within a 1-inch area of contusion is situated 7 1/4-inches below the top of the left

shoulder and ¼-inch medial to the anterior midline of the left arm. No bullet or bullet fragments are recovered. The direction of the wound path is left to right, back to front, and downward.

INTERNAL EXAMINATION

HEAD:
The scalp is uninjured. There are no skull fractures or other evidence of significant trauma present. The calvarium is removed to demonstrate an absence of epidural or subdural hemorrhage. Examination of the brain reveals a normal pattern of gyri and sulci. Serial sectioning reveals no evidence of traumatic or atraumatic abnormalities. The vessels at the base of the brain have a normal distribution and appearance. The brain weighs 1380-grams.

NECK:
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.

BODY CAVITIES:
The ribs, sternum, and vertebral bodies are visibly and palpably intact. Injuries to the chest and mediastinum have been described previously. There is no abnormal accumulation of fluid in the peritoneal cavity. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs weigh 320 and 180-grams, respectively, and have the previously described injuries. The external surfaces are deep red-purple. No mass lesions or areas of consolidation are present. The pulmonary arteries are free of emboli.

CARDIOVASCULAR SYSTEM:
The 310-gram heart has the previously described injuries. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show no significant atherosclerosis. The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.4 and 0.5-centimeters thick, respectively. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 1450-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 is empty. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 180-gram spleen has a smooth, intact, red-purple capsule. The parenchyma is soft, maroon, and congested, with early decompositional changes.

PANCREAS:
The pancreas exhibits early to moderate decompositional changes.

ADRENAL GLANDS:
The right and left adrenal glands are symmetric, with yellow cortices, gray medullae, and early decompositional changes. No masses or areas of hemorrhage are identified.

GENITOURINARY SYSTEM:
The right and left kidneys weigh 140 and 110-grams, respectively. The external surfaces are intact and smooth. The cut surfaces are red-tan and congested, with uniformly thick cortices and sharp corticomedullary junctions. The pelves are unremarkable and the ureters are normal in course and caliber. White bladder mucosa overlies an intact bladder wall. The urinary bladder contains 150-milliliters of light yellow urine.

GASTROINTESTINAL TRACT:
The esophagus is intact and lined by smooth, hemorrhagic appearing mucosa. The stomach contains approximately 100-milliliters food particles, including beans and rice. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

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

MICROSCOPIC EXAMINATION

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

ADDITIONAL PROCEDURES/REMARKS

- Documentary photographs are taken by OAFME staff photographer, (b)(6) (b)(6)
- Specimens retained for toxicologic testing and/or DNA identification are: cavity blood, spleen, liver, brain, bile, urine, lung, gastric contents, kidney, and psoas muscle
- Full body radiographs are obtained and demonstrate the metallic foreign body subsequently recovered from the right chest wall
- The dissected organs and clothing are forwarded with body

OPINION

This White male detainee in U.S. custody died as a result of a shotgun wound to the chest that caused injury to the lungs and heart. There was also extensive bleeding into the chest cavity. A metallic projectile was recovered from the subcutaneous tissue of the right upper chest and turned over to the USACID Agent who was present at the autopsy. Additional shotgun wound paths involved the right upper back and both arms. The location and appearance of the wound paths involving the right upper back and right arm make it likely that a single projectile resulted in both wounds, with re-entry of the projectile into the right arm after exiting the right back. The manner of death is homicide.

(b)(6)

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

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

REPLY TO ATTENTION OF

AFIP (b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION
AFIP Accessions Number Sequence
(b)(6)
Name
HABIB, FAAS M.
Detainee ID: (b)(6)
SSAN: Autopsy: (b)(6)
Toxicology Accession #: (b)(6)
Date Report Generated: September 13, 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS **REPORT OF TOXICOLOGICAL EXAMINATION**

Condition of Specimens: GOOD
Date of Incident: (b)(6) 2004 **Date Received:** 9/7/2004

VOLATILES: The **BLOOD** and **URINE** were examined for the presence of ethanol at a cutoff of 20 mg/dL. No ethanol was detected.

DRUGS: The **BLOOD** was screened for acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, salicylates, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

None were found.

(b)(6)
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(b)(6)
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ARMED FORCES INSTITUTE OF PATHOLOGY
Office of the Armed Forces Medical Examiner
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Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY EXAMINATION REPORT

Name: Ghafar, Husham N.
SSAN: Detainee Number (b)(6)
Date of Birth: Unknown
Date of Death: (b)(6) 2004
Date of Autopsy: 30 AUG 2004
Date of Report: 12 OCT 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Detainee in U.S. Custody
Place of Death: Iraq
Place of Autopsy: BIAP Mortuary, Baghdad, Iraq

Circumstances of Death: This Iraqi male was a detainee in U.S. custody at Abu Ghraib prison in Baghdad, Iraq. A group of prisoners became unruly and the guards used lethal force to subdue the crowd. A shotgun was fired and this detainee was struck and killed.

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

Identification: Circumstantial identity is established by paperwork accompanying the detainee and his designation as detainee number (b)(6)

CAUSE OF DEATH: Shotgun Wound of the Head

MANNER OF DEATH: Homicide

FINAL AUTOPSY DIAGNOSES:

I. **Shotgun Wound of the Head**

   A. **Penetrating Shotgun Wound of the Head**
      1. **Entrance: Right side of the back of the head; no evidence of close-range discharge of a firearm on the surrounding scalp**
      2. **Wound Path: Right parietal-occipital scalp, parietal-occipital skull, right cerebrum, left cerebrum**
      3. **Recovered: Deformed metallic foreign body located between the medial aspect of the left frontal lobe and the overlying dura**
      4. **Wound Direction: Right to left, back to front, and upward**
      5. **Associated Injuries: Subgaleal, subdural and subarachnoid hemorrhages, bilateral basilar skull fractures, cerebral contusions, and bone fragments along the hemorrhagic wound path**

II. **No evidence of significant natural disease processes, within the limitations of the examination**

III. **Changes of early to moderate decomposition**

IV. **The recovered projectile is placed in a labeled container and given to the investigating agent who was present at the autopsy**

V. **Toxicology is positive for morphine at a concentration of 0.23 mg/L in the blood. No ethanol or other drugs of abuse are detected.**

EXTERNAL EXAMINATION

The remains are received without clothing. No identification bands are present on the body. The unclad body is that of a well-developed, well-nourished appearing, 69-inches, 140-pounds (estimated), White male. The age of the individual is not known. Lividity is posterior and fixed, except in areas exposed to pressure. Rigor has passed. The body temperature is that of the refrigeration unit. Early to moderate decomposition changes are present, including mild skin slippage, prominent vascular marbling, and clouding of the corneae.

The scalp is covered with medium length, brown hair in a normal distribution. Facial hair consists of a beard and mustache. The irides are brown and the pupils are round and equal in diameter. The external ears are unremarkable. The nose and maxillae are palpably stable. Bloody fluid is present in the nares. The teeth are natural and in fair condition.

The neck is mobile and the trachea is midline. The chest is symmetric. The abdomen is flat. The external genitalia are those of a normal adult male. Pubic hair is shaved. There is no evidence of external trauma to the urogenital area. The buttocks and anus are unremarkable. There are areas of hypopigmentation present on the lower trunk and the extremities.

The upper and lower extremities are symmetric and without clubbing or edema. The fingernails are intact. No tattoos or significant identifying body marks are present. Black writing is present on both sides of the chest; (b)(6) is on the right side and a series of illegible numbers is on the left side.

EVIDENCE OF MEDICAL INTERVENTION

- Vascular access devices in the left arm, both antecubital fossae, and the left subclavian area
- Oral-gastric intubation
- Endotracheal intubation
- Foley catheterization
- Electrocardiogram monitoring pads on the upper right chest and the left hip
- Contusion over the sternum, consistent with cardiopulmonary resuscitation

RADIOGRAPHS

Full body radiographs are obtained and show a metallic foreign body in the head.

EVIDENCE OF INJURY

I. Shotgun Wound of the Head

There is a penetrating ballistic entrance wound on the right side of the back of the head, situated 4 3/8-inches below the top of the head and 2 ¼-inches right of the posterior midline. The ovoid wound is ¼ x 3/16-inches, with a 1/16-inch marginal

abrasion from the 3 to 6 o'clock positions. No soot deposition or gunpowder stippling is present on the surrounding skin. The wound path goes through the occipital scalp and includes a 5/16 x 3/8-inch defect in the right side of the occipital bone, with appropriate beveling. The wound path through the brain perforates the right occipital, right parietal, and both frontal lobes. A slightly deformed, round, metallic projectile is recovered from the dura overlying the medial aspect of the left frontal lobe of the brain at the anterior midline. The projectile is placed in a labeled container and turned over to the investigating USACID agent present at the autopsy. The wound direction is right to left, back to front, and upward. Injuries associated with the wound path include fine linear fractures extending across the middle fossae of the basilar skull, a 1-inch linear fracture of the occipital bone extending from the 4 o'clock position of the entrance wound skull defect, and subgaleal, subdural, and subarachnoid hemorrhages. Scattered cerebral contusions and bone fragments along the hemorrhagic wound path are also present.

INTERNAL EXAMINATION

HEAD:
Injuries of the head have been described previously. The vessels at the base of the brain have a normal distribution and appearance. The brain weighs 1150-grams.

NECK:
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.

BODY CAVITIES:
The ribs, sternum, and vertebral bodies are visibly and palpably intact. Both pleural cavities contain 100-milliliters of decomposition fluid and the pericardial sac contains 20-milliliters of decomposition fluid. There is no abnormal accumulation of fluid in the peritoneal cavity. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs weigh 580 and 550-grams, respectively. The external surfaces are smooth and deep red-purple, with moderate anthracotic mottling. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present. The pulmonary arteries are unremarkable.

CARDIOVASCULAR SYSTEM:
The 220-gram heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show no significant atherosclerosis. The myocardium is homogenous, red-brown, and soft, with early decompositional changes. The valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.1 and 0.3-centimeters thick, respectively. The endocardium is smooth. The aorta gives rise to three intact and patent arch vessels. Fatty streaking of the aorta is noted. The renal and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 1050-gram liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture and changes of early decomposition. No mass lesions or other abnormalities are seen. The gallbladder contains 15-milliliters of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 240-gram spleen has a smooth, intact, red-purple capsule. The parenchyma is soft, maroon, and congested, with changes of early decomposition.

PANCREAS:
The pancreas has the usual lobular architecture and early decompositional changes. No mass lesions or other abnormalities are seen.

ADRENAL GLANDS:
The right and left adrenal glands are symmetric, with yellow cortices, gray medullae, and decompositional changes. No masses or areas of hemorrhage are identified.

GENITOURINARY SYSTEM:
The right and left kidneys weigh 150 and 120-grams, respectively. The external surfaces are intact and smooth. The cut surfaces are red-tan and congested, with uniformly thick cortices and distinct corticomedullary junctions. The pelves are unremarkable and the ureters are normal in course and caliber. White bladder mucosa overlies an intact bladder wall. The urinary bladder is empty. The prostate gland is unremarkable. The testes have no masses and exhibit no evidence of trauma.

GASTROINTESTINAL TRACT:
The esophagus is intact and lined by smooth, hemorrhagic appearing mucosa. The stomach contains approximately 70-milliliters of dark brown fluid. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

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

MICROSCOPIC EXAMINATION

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

ADDITIONAL PROCEDURES/REMARKS

- Documentary photographs are taken by OAFME staff photographer, (b)(6) (b)(6)
- Specimens retained for toxicologic testing and/or DNA identification are: heart blood, spleen, liver, brain, bile, lung, kidney, adipose, and psoas muscle
- Full body radiographs are obtained and demonstrate the metallic foreign body subsequently recovered from the brain
- The dissected organs are forwarded with body

OPINION

This White male detainee in U.S. custody died as a result of a shotgun wound of the head that caused injury to the skull and brain. Toxicology was positive for morphine, which was likely the result of medical therapy received prior to death. One metallic projectile was recovered from the head and turned over to the investigating USACID agent who was present at the autopsy. The manner of death is homicide.

(b)(6)

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

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

REPLY TO ATTENTION OF

AFIP: (b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION
AFIP Accessions Number Sequence
(b)(6)

Name
GHAFAR, HUSHAM N. (b)(6)

SSAN: **Autopsy:** (b)(6)
Toxicology Accession #: (b)(6)
Date Report Generated: September 27, 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS **REPORT OF TOXICOLOGICAL EXAMINATION**

Condition of Specimens: GOOD
Date of Incident: (b)(6) 2004 **Date Received:** 9/7/2004

VOLATILES: The **BLOOD AND BILE** were examined for the presence of ethanol at a cutoff of 20 mg/dL. No ethanol was detected.

DRUGS: The **BLOOD** was screened for acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, chloroquine, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, salicylates, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

Positive Opiate: Morphine was detected in the blood by immunoassay and confirmed by gas chromatography/mass spectrometry. The blood contained 0.23 mg/L of morphine as quantitated by gas chromatography/mass spectrometry.

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Office of the Armed Forces Medical Examiner
1413 Research Blvd., Bldg. 102
Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY REPORT

Name: Najem. Fawaz Badaa
National Detainee Reporting System: (b)(6)
Date of Birth: (b)(6) 1962
Date of Death: (b)(6) 2004
Date of Autopsy: 19 June 2004
Date of Report: 13 October 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Iraqi civilian
Place of Death: Abu Ghraib, Iraq
Place of Autopsy: Baghdad, Iraq

Circumstances of Death: This 42 year-old male Iraqi civilian was in US custody at the Baghdad Central Confinement Facility in Abu Ghruyeb, Iraq. By report, he began making gasping sounds, which awoke another detainee. The decedent was found to be unresponsive and pulseless, and resuscitation efforts were unsuccessful.

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

Identification: Visual and documentation accompanying the body; fingerprints and DNA sample obtained

CAUSE OF DEATH: Undetermined

MANNER OF DEATH: Undetermined

FINAL AUTOPSY DIAGNOSES:

I. No evidence of any definitive significant trauma
   a. Minor contusions of abdomen and left arm

II. Cardiovascular Findings (AFIP Cardiovascular Pathology consultation)
   a. Mild coronary atherosclerosis
      i. 40% luminal narrowing of proximal left anterior descending coronary artery
      ii. 20% luminal narrowing of proximal left circumflex coronary artery
      iii. 30% luminal narrowing of proximal right coronary artery by intimal thickening
   b. Moderate dysplasia of atrioventricular nodal artery
      i. No increased fibrosis of septum

III. Additional Findings; probable artifacts of resuscitation or freezing of body
   a. Film of peritoneal blood of upper abdomen, < 50 ml
   b. Hepatic findings
      i. Subcapsular accumulation of blood over right lobe of liver; capsule grossly intact
      ii. Parenchymal clefts and focal disruption of right lobe of liver
         1. Histologically, no inflammatory response, fibrin or clot formation, or other evidence of any vital reaction

IV. Medical Intervention
   a. Endotracheal tube in place
   b. Intravenous catheter in left antecubital fossa
   c. One adhesive EKG tab on abdomen

V. Early to moderate decomposition
   a. Marbling of torso, arms and legs
   b. Marked facial and scalp congestion and dark discoloration
   c. Corneal opacification

VI. Toxicology (AFIP)
   a. Volatiles: Heart blood and urine negative for ethanol
   b. Cyanide: Heart blood negative
   c. Drugs: Heart blood negative for screened medications and drugs of abuse

EXTERNAL EXAMINATION

The body is that of a well developed, well-nourished male clad in a pair of yellow "Reebok" shorts, a pair of grey drawstring pants, and a previously cut, white t-shirt. The body weighs approximately 150 pounds, is 67" in height and appears compatible with the reported age of 42 years. The body is cold, the temperature that of the refrigeration unit. Rigor is waning. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure, and over the face and head.

Early to moderate decompositonal changes are present, consisting of diffuse marbling of the back, upper arms and legs; early marbling of the sides of the abdomen; partial corneal opacification; and dark discoloration and congestion of the face, scalp and neck.

The scalp is covered with black hair with frontal and parietal alopecia but otherwise in a normal distribution, averaging 3 cm in length. Facial hair consists of a dark mustache and full beard. The irides appear dark, but are partially obscured by corneal clouding. The sclerae and conjunctivae are congested, especially of the left eye, but there are no petechiae. The earlobes are not pierced. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal skeleton is palpably intact. The lips are without evident injury. The teeth are natural and in good condition.

Examination of the neck reveals the trachea to be midline and mobile. The chest is symmetric and well developed. No injury of the ribs or sternum is evident externally. The abdomen is slightly protuberant and soft. There is a 2 x 1 cm dark macule on the mid right side of the back.

The extremities are well developed with normal range of motion. There is a 2 x 1 cm hyperpigmented patch on the back of the right wrist. There are thick calluses on lateral aspect of the right ankle and on the soles of the feet, which are also dirt stained. The fingernails are short and intact. No tattoos are noted. The external genitalia are those of a normal adult circumcised male. The testes are descended and free of masses. Pubic hair is partially shaved but present in a normal distribution. The buttocks and anus are unremarkable.

There is an identification band with the name and photograph of the decedent around the left wrist, and there is an identification tag with the name of the decedent and date of death on the first toe of the left foot. There are creases around the lateral aspects of the ankles consistent with postmortem securing of the body.

EVIDENCE OF THERAPY

There is an endotracheal tube in place secured with white tape around the head, and there is an adhesive EKG tab on the lower right side of the abdomen. There is a needle puncture mark with surrounding ecchymosis in the right antecubital fossa, and there is an intravenous catheter secured with white tape in the left antecubital fossa.

EVIDENCE OF INJURY

There is a 2 x 0.3 cm red contusion just above the umbilicus, and there is a 3.5 x 2.5 cm red contusion of the lower right aspect of the abdomen. On the anterior (palmar) aspect of the left lower forearm and wrist, there is a 4 x 3 cm red brown contusion, and there is a 3 x 2 cm contusion of the left thenar region.

On external examination of the body, there is no other evidence of trauma.

INTERNAL EXAMINATION

BODY CAVITIES:
The body is opened by the usual thoraco-abdominal incision, and the chest plate is removed. No adhesions or abnormal collections of fluid are present in the pleural or pericardial cavities. There is a film of blood in the upper peritoneal cavity, less than 50 ml. No adhesions or abnormal collections of fluid are present in the peritoneal cavity. All body organs are present in the normal anatomical position. The subcutaneous fat layer of the abdominal wall is 2 cm thick. There is no internal evidence of blunt force or penetrating injury to the thoraco-abdominal region.

HEAD: (CENTRAL NERVOUS SYSTEM)
The scalp is reflected, and there is marked subgaleal congestion and fixed lividity, but no subgaleal hemorrhage or skull fractures found. The calvarium of the skull is removed. The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage present. The leptomeninges are thin and delicate. The cerebrospinal fluid is dark with decompositional change, most prominent over the occiput; however, there is no evidence of any subarachnoid hemorrhage. 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 revealed no lesions, and there is no evidence of infection, tumor, or trauma. Transverse sections through the brain stem and cerebellum are unremarkable. The dura is stripped from the basilar skull, and no fractures are found. The atlanto-occipital joint is stable. The brain weighs 1455 grams.

NECK:
Examination of the soft tissues of the neck, including strap muscles, thyroid gland and large vessels, reveals no abnormalities. 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 and is unobstructed. The thyroid gland is symmetric and red-brown, without cystic or nodular change. There is no evidence of infection, tumor, or trauma, and the airway is patent. Incision and dissection of the posterior neck demonstrates no deep paracervical muscular injury, hemorrhage, or fractures of the dorsal spinous processes.

CARDIOVASCULAR SYSTEM:
See "Cardiovascular Pathology Report" below. The pericardial surfaces are smooth, glistening and unremarkable; the pericardial sac is free of significant fluid and adhesions. A moderate amount of epicardial fat is present. The coronary arteries arise normally in a right dominant pattern and follow the usual distribution. There is mild atherosclerosis with focal areas of luminal stenosis of the coronary arteries, without evidence of thrombosis. The myocardium is dark red-brown, firm and unremarkable; the atrial and ventricular septa are intact. The left ventricle is 1.5 cm in thickness and the right ventricle is 0.4 cm in thickness. 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 435 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 are smooth, glistening and unremarkable bilaterally. The pulmonary parenchyma is red-purple and edematous, exuding a moderate amount of bloody fluid; no focal lesions are noted. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 605 grams; the left 480 grams.

LIVER & BILIARY SYSTEM:
The hepatic capsule is smooth, glistening and intact, covering dark red-brown, moderately congested parenchyma. There is focal accumulation of subcapsular blood and underlying parenchymal disruption, with clefts and splitting of the parenchyma without associated hemorrhage, consistent with resuscitation or postmortem changes. The gallbladder contains 5 ml of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi. The liver weighs 1940 grams.

ALIMENTARY TRACT:
The tongue exhibits no evidence of recent injury. The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and the lumen contains a film of dark fluid. The small and large bowel are unremarkable. The pancreas has a normal pink-tan lobulated appearance and the ducts are clear. The appendix is present and is 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. There is a single dark calculus in the right renal pelvis. The calyces, pelves and ureters are otherwise unremarkable. White bladder mucosa overlies an intact bladder wall. The urinary bladder contains 20 ml of cloudy, yellow urine. The prostate gland is symmetrical with lobular, yellow-tan parenchyma and no nodules or masses. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities. The right kidney weighs 210 grams; the left 220 grams.

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 260 grams.

ENDOCRINE SYSTEM:
The pituitary, thyroid and adrenal glands are unremarkable.

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

MICROSCOPIC EXAMINATION

HEART: See "Cardiovascular Pathology Report" below.

BRAIN: See "Neuropathology Report" below.

LUNGS: The alveolar spaces and small air passages are expanded and contain no significant inflammatory component or edema fluid. The alveolar walls are thin and mildly congested. The arterial and venous vascular systems are normal. The peribronchial lymphatics are unremarkable.

LIVER: There are numerous clefts and splits of the parenchyma, focally with lakes of red blood cells. However, there is no inflammatory response or evidence of organization of the hemorrhage, with no fibrin or clot formation. The hepatic architecture is otherwise intact. The portal areas show no increased inflammatory component or fibrous tissue. The hepatic parenchymal cells are well-preserved with mild focal steatosis but no evidence of cholestasis, or sinusoidal abnormalities.

SPLEEN: The capsule and white pulp are unremarkable. There is moderate congestion of the red pulp.

ADRENALS: The cortical zones are distinctive and well supplied with lipoid. The medullae are not remarkable.

KIDNEYS: The subcapsular zones are unremarkable. The glomeruli are mildly congested without cellular proliferation, mesangial prominence, or sclerosis. The tubules are well preserved. There is no interstitial fibrosis or significant inflammation. There is no thickening of the walls of the arterioles or small arterial channels. The transitional epithelium of the collecting system is normal.

TESTES: Unremarkable

THYROID GLAND: Unremarkable

CARDIOVASCULAR PATHOLOGY REPORT

Department of Cardiovascular Pathology, AFIP:

"**AFIP DIAGNOSIS:** (b)(6)

1. **Moderate dysplasia of atrioventricular nodal artery**
2. **Mild coronary artery atherosclerosis**

History: 42 year old male Iraqi detainee, 67", 150 lbs, death in custody
Heart: 435 grams (predicted normal value 322 grams, upper limit 425 grams for a 150 lbs male); normal epicardial fat; closed foramen ovale; left ventricular hypertrophy: left ventricular cavity diameter 35 mm, left ventricular free wall thickness 15 mm, ventricular septum thickness 15 mm; right ventricle thickness 4 mm, without gross scars or abnormal fat infiltrates; grossly unremarkable valves and endocardium; enlarged membranous septum; no gross myocardial fibrosis or necrosis; histologic sections show mild left ventricular myocyte hypertrophy, otherwise unremarkable
Coronary arteries: Normal ostia; right dominance; mild atherosclerosis: 40% luminal narrowing of proximal left anterior descending, 20% narrowing of proximal left circumflex, and 30% narrowing of proximal right coronary artery by pathologic intimal thickening
Conduction System: The sinoatrial node is unremarkable. The sinus nodal artery shows minimally increased proteoglycan. The atrioventricular (AV) nodal artery shows moderate dysplasia in its posterior approaches to the compact AV node and in its penetrating branches in the ventricular septum, but fibrosis is not significantly increased in the septum. The penetrating bundle is centrally located between the node and ventricular septum. The right proximal bundle branch is unremarkable. The left proximal bundle is not seen in these sections.
Comment: We do not see an obvious cardiac cause of death. Moderate dysplasia of the atrioventricular nodal artery is often associated with increased fibrosis in the crest of the ventricular septum, representing a potential substrate for cardiac arrhythmia. However, increased fibrosis is not seen in this case. We cannot exclude the possibility of cardiac arrhythmia related to various ion channelopathies or coronary vasospasm."

NEUROPATHOLOGY REPORT

Department of Neuropathology and Ophthalmic Pathology, AFIP:

"We reviewed multiple small fragments of dura, cerebrum, brainstem and cerebellum submitted in formalin in reference to this case. No gross abnormalities are present. Representative sections were processed in paraffin and sections stained with H&E, and immunohistochemical methods for beta amyloid precursor protein (BAPP), and glial fibrillary acidic protein (GFAP). This material was reviewed in conference by the staff of Neuropathology. Sections show few neurons within the cerebral cortex with shrunken or vacuolated cytoplasm and hyperchromatic nuclei, findings interpreted as non-specific acute neuronal injury. Stains for BAPP and GFAP are negative."

ADDITIONAL PROCEDURES

- Documentary photographs are taken by OAFME photographers
- Specimens retained for toxicologic testing and/or DNA identification are: vitreous fluid, heart blood, urine, and bile
- The dissected organs are forwarded with the body
- Personal effects are released to the appropriate mortuary operations representative

OPINION

Based on available investigation and complete autopsy examination, no definitive cause of death for this 42 year-old male Iraqi civilian in US custody in Iraq could be determined. There is no evidence of any significant trauma to explain the death. There is a film of blood in the upper abdomen, and a small accumulation of subcapsular blood over the right lobe of the liver with associated subcapsular parenchymal disruption. However, the minimal amount of hemorrhage, lack of capsular laceration, and microscopic lack of vital reaction indicates this is likely a post-mortem artifact, either from resuscitation efforts or freezing of the body. There are non-specific cardiac findings, including moderate dysplasia of the atrioventricular nodal artery. However, there is no associated increased septal fibrosis, which can be a potential substrate for cardiac arrhythmia. There is also mild coronary artery atherosclerosis, but no luminal narrowing greater than 40% was found. A cardiac arrhythmia related to various ion channelopathies or coronary vasospasm cannot be excluded.

Therefore, the cause of death is best classified as undetermined, and the manner of death is undetermined.

(b)(6)

(b)(6) Medical Examiner

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

REPLY TO ATTENTION OF

AFIP-(b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION
AFIP Accessions Number Sequence
(b)(6)

Name
NAJEM, FAWAZ B.

SSAN: **Autopsy:** (b)(6)
Toxicology Accession #: (b)(6)
Date Report Generated: June 30, 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS **REPORT OF TOXICOLOGICAL EXAMINATION**

Condition of Specimens: GOOD
Date of Incident: **Date Received:** 6/22/2004

VOLATILES: The **HEART BLOOD AND URINE** were examined for the presence of ethanol at a cutoff of 20 mg/dL. No ethanol was detected.

CYANIDE: There was no cyanide detected in the heart blood. The limit of quantitation for cyanide is 0.25 mg/L. Normal blood cyanide concentrations are less than 0.15 mg/L. Lethal concentrations of cyanide are greater than 3 mg/L.

DRUGS: The **BLOOD** was screened for amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

None were found.

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Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY REPORT

Name: Abd Al Razak, Riadh Mohammed
National Detainee Reporting Systen (b)(6)
Date of Birth: (b)(6) 1952
Date of Death: (b)(6) 2004
Date of Autopsy: 19 June 2004
Date of Report: 22 September 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Iraqi civilian
Place of Death: Abu Ghraib, Iraq
Place of Autopsy: Baghdad, Iraq

Circumstances of Death: This 52 year-old male Iraqi civilian collapsed while speaking to other detainees while in US custody at the Baghdad Central Confinement Facility in Abu Ghruyeb, Iraq, and resuscitative efforts were unsuccessful.

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

Identification: Visual and documentation accompanying the body; fingerprints and DNA sample obtained

CAUSE OF DEATH: Atherosclerotic Cardiovascular Disease

MANNER OF DEATH: Natural

FINAL AUTOPSY DIAGNOSES:

I. Atherosclerotic Cardiovascular Disease
   a. Severe coronary atherosclerosis with calcification
      i. Left main coronary artery, 50% luminal narrowing by fibrocalcific plaque
      ii. Total occlusion of proximal left anterior descending artery (LAD) with healed plaque rupture and organized thrombus; 75% narrowing of mid LAD by fibroatheroma; 65% narrowing of distal LAD by fibrocalcific plaque; total occlusion of ramus intermedius by healed rupture with fibrointimal thickening and smooth muscle proliferation
      iii. Total occlusion of proximal to mid left circumflex artery (LCA) by organized and recanalized thrombus; 70% fibrocalcific narrowing of distal LCA; 90% narrowing of obtuse marginal artery with fibrointimal thickening and smooth muscle proliferation
      iv. Right coronary artery (RCA), 25% narrowing of proximal RCA by fibrocalcific plaque; 40% narrowing of mid RCA by fibroatheroma; 70% fibrocalcific narrowing of distal RCA; 95% narrowing of posterior descending artery by fibroclcific plaque and smooth muscle proliferation
   b. Healed transmural myocardial infarction
      i. Involves anterior, septal and lateral left ventricle mid ventricle to apex
      ii. Microscopically, transmural fibrosis and fat replacement in anterior, septal and lateral walls of left ventricle
      iii. Aneurysmal dilatation
      iv. Epicardial fibrous adhesions at apex of left ventricle
   c. Cardiomegaly with biventricular hypertrophy
      i. Heart 666 gm (predicted normal value 343 gm)
      ii. Left ventricular cavity diameter 60 mm
      iii. Left ventricular free wall thickness 10 mm
      iv. Microscopically, biventricular myocyte hypertrophy with subendocaridal and perivascular interstitial fibrosis
   d. Moderate to severe atherosclerosis of the aorta
      i. Diffuse calcific intimal plaque formation
      ii. Focal plaque rupture with associated hemorrhage
   e. Pulmonary edema
      i. Right lung 965 grams
      ii. Left lung 818 grams

II. No evidence of any significant trauma
   a. Abrasion, 4 x 3 cm on back of right forearm
   b. Contusion, 7 x 4 cm on back of right hand

III. Additional Findings
   a. Subcutaneous lipoma of anterior left side of neck
   b. Right renal calculus (kidney stone)
   c. Prostatic hypertrophy
   d. Symmetrically enlarged thyroid gland

IV. Medical Intervention
   a. Endotracheal tube in place
   b. Three adhesive EKG tabs on body

V. Early to moderate decomposition
   a. Diffuse marbling of body
   b. Corneal opacification

VI. Toxicology (AFIP)
   a. Volatiles: Heart blood and urine negative for ethanol
   b. Cyanide: Heart blood negative
   c. Drugs: Heart blood negative for screened medications and drugs of abuse

EXTERNAL EXAMINATION

The body is that of a well developed, well-nourished male clad in a previously cut, white long sleeve shirt-dress ("dish dash") and white boxer shorts. The body weighs approximately 170 pounds, is 71" in height and appears compatible with the reported age of 52 years. The body is cold, the temperature that of the refrigeration unit. Rigor is waning. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure, and is especially pronounced on the face.

Early to moderate decompositonal changes are present, consisting of diffuse marbling and discoloration of the body and corneal opacification.

The scalp is covered with black and grey hair in a normal distribution, averaging 4 cm in length. Facial hair consists of a dark mustache and grey facial stubble. The irides appear dark, but are partially obscured by corneal clouding. The sclerae and conjunctivae are congested, especially on the left, with no petechiae. The earlobes are not pierced. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal skeleton is palpably intact. The lips are without evident injury. The teeth are natural and in good condition.

Examination of the neck reveals the trachea to be midline and mobile. There is a palpable 3 x 2 cm subcutaneous nodule on the anterior left side of the neck. The chest is symmetric and well developed. No injury of the ribs or sternum is evident externally. The abdomen is slightly protuberant and soft. The extremities are well developed with normal range of motion. There is a 4 x 1.5 cm scar on the upper anterior aspect of the right forearm, and there are irregular scars over the left knee. The fingernails are short and intact. No tattoos are noted, and needle tracks are not observed. The external genitalia are those of a normal adult circumcised male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The buttocks and anus are unremarkable. There is an identification tag on the first toe of the left foot.

EVIDENCE OF THERAPY

There is an endotracheal tube in place secured with white tape around the head, and there are three adhesive EKG tabs on the body, two on the upper chest and one on the left thigh. There is a band-aid on the right antecubital fossa over a needle puncture mark with surrounding ecchymosis.

EVIDENCE OF INJURY

There is a 4 x 3 cm abrasion on the back of the right forearm and there is a 7 x 4 cm contusion on the back of the right hand. On external and internal examination of the body, there is no other evidence of trauma.

INTERNAL EXAMINATION

BODY CAVITIES:
The body is opened by the usual thoraco-abdominal incision, and the chest plate is removed. There is approximately 50 ml of serosanguinous fluid in each pleural space, and there are multiple pleural adhesions of the right chest cavity. No adhesions or abnormal collections of fluid are present in the peritoneal cavity. All body organs are present in the normal anatomical position. The subcutaneous fat layer of the abdominal wall is 4 cm thick. There is no internal evidence of blunt force or penetrating injury to the thoraco-abdominal region.

HEAD: (CENTRAL NERVOUS SYSTEM)
The scalp is reflected, and there is no subgaleal hemorrhage or skull fractures found. The calvarium of the skull is removed. The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage present. The leptomeninges are thin and delicate. The cerebrospinal fluid is dark with decompositional change, most prominent over the occiput; however, there is no evidence of any subarachnoid hemorrhage. 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 revealed no lesions, and there is no evidence of infection, tumor, or trauma. Transverse sections through the brain stem and cerebellum are unremarkable. The dura is stripped from the basilar skull, and no fractures are found. The atlanto-occipital joint is stable. The brain weighs 1180 grams.

NECK:
On dissection of the soft tissue of the neck, there is a well-circumscribed yellow 3 x 2 cm nodule just under the skin on the anterior left side of the neck, adjacent to the thyroid cartilage. On sectioning, the nodule is uniformly fatty, consistent with a lipoma. Examination of the soft tissues of the neck, including strap muscles, thyroid gland and large vessels, otherwise reveals no abnormalities. 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 and is unobstructed. The thyroid gland is large but symmetric and red-brown, without cystic or nodular change. There is no evidence of infection, tumor, or trauma, and the airway is patent. Incision and dissection of the posterior neck demonstrates no deep paracervical muscular injury, hemorrhage, or fractures of the dorsal spinous processes.

CARDIOVASCULAR SYSTEM:
There are dense apical adhesions of the heart to the pericardial sac, and there is marked aneurysmal dilatation of the left ventricle. See "Cardiovascular Pathology Report" below. A moderate amount of epicardial fat is present, and the heart weighs 666 grams. The aorta and its major branches arise normally and follow the usual course. There is diffuse moderate to severe atherosclerosis of the aorta with extensive calcific intimal plaque formation and focal plaque rupture with associated hemorrhage. The venae cavae and their major tributaries return to the heart in the usual distribution and are free of thrombi.

RESPIRATORY SYSTEM:
The upper airway is clear of debris and foreign material; the mucosal surfaces are smooth, yellow-tan and unremarkable. There are scattered pleural adhesions of the right chest cavity. The pleural surfaces are otherwise smooth, glistening and unremarkable bilaterally. The pulmonary parenchyma is red-purple and edematous, exuding a moderate amount of bloody fluid; no focal lesions are noted. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 965 grams; the left 818 grams.

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 5 ml of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi. The liver weighs 1498 grams.

ALIMENTARY TRACT:
The tongue exhibits no evidence of recent injury. The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 100 ml of dark fluid. The small and large bowel are unremarkable. The pancreas has a normal pink-tan lobulated appearance and the ducts are clear. The appendix is present and is 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. There is a single dark calculus in the right renal pelvis. The calyces, pelves and ureters are otherwise unremarkable. White bladder mucosa overlies an intact bladder wall. The urinary bladder contains 50 ml of cloudy, yellow urine. The prostate gland is enlarged but symmetrical with lobular, yellow-tan parenchyma and no nodules or masses. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities. The right kidney weighs 207 grams; the left 235 grams.

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 278 grams.

ENDOCRINE SYSTEM:
The pituitary and adrenal glands are unremarkable. The thyroid gland is symmetrically enlarged, but free of nodules or masses.

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

MICROSCOPIC EXAMINATION

Heart: See "Cardiovascular Pathology Report" below.

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

CARDIOVASCULAR PATHOLOGY REPORT

Department of Cardiovascular Pathology, AFIP:

"AFIP DIAGNOSIS: (b)(6)

1. **Severe coronary atherosclerosis with calcification, three vessel disease**
2. **Healed transmural infarction with aneurysmal dilatation, anterior, septal, and lateral left ventricle**
3. **Cardiomegaly with biventricular hypertrophy**

History: 52 year old male Iraqi detainee, 5'11", 170 lbs, found dead in bed
Heart: 666 grams (predicted normal value 343 grams, upper limit 453 grams for a 170 lbs male); focal epicardial fibrous adhesions at apex of left ventricle; closed foramen ovale; aneurysmal dilatation of left ventricle: left ventricular cavity diameter 60 mm, left ventricular free wall thickness 10 mm, ventricular septum thickness 10 mm; right ventricle thickness 4 mm; endocardial thickening in left atrium and left ventricle; unremarkable valves; healed transmural infarct, anterior and septal walls of left ventricle, mid ventricle to apex; subendocardial hyperemia, anterior and lateral walls of left ventricle; histologic sections show biventricular myocyte hypertrophy with subendocardial and perivascular interstitial fibrosis; transmural fibrosis and fat replacement in anterior, septal, and lateral walls of left ventricle.
Coronary arteries: Normal ostia; right dominance; severe calcific atherosclerois:

Left main coronary artery: 50% luminal narrowing by fibrocalcific plaque
Left anterior descending artery (LAD): Total occlusion of proximal LAD with healed plaque rupture and organized thrombus; 75% narrowing of mid LAD by thin capped fibroatheroma and 65% narrowing of distal LAD by fibrocalcific plaque; total occlusion of ramus intermedius by healed rupture with fibrointimal thickening and smooth muscle proliferation
Left circumflex artery (LCA): Total occlusion of proximal to mid LCA by organized and recanalized thrombus, 70% fibrocalcific narrowing of distal LCA; 90% narrowing of obtuse marginal artery with fibrointimal thickening and smooth muscle proliferation
Right coronary artery (RCA): 25% narrowing of proximal RCA by fibrocalcific plaque, 40% narrowing of mid RCA by thin capped fibroatheroma, and 70% fibrocalcific narrowing of distal RCA; 95% narrowing of posterior descending artery by fibrocalcific plaque and smooth muscle proliferation."

ADDITIONAL PROCEDURES

- Full body radiographs are obtained and show no evidence of trauma.
- Documentary photographs are taken by OAFME photographers
- Specimens retained for toxicologic testing and/or DNA identification are: vitreous fluid, heart blood, urine, and bile
- The dissected organs are forwarded with the body
- Personal effects are released to the appropriate mortuary operations representative

OPINION

This 52 year-old male Iraqi civilian in US custody in Iraq died of atherosclerotic cardiovascular disease, with severe coronary artery disease and a healed myocardial infarction (previous heart attack), extensively involving the left ventricle. There is no evidence of any significant trauma.

The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

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

REPLY TO ATTENTION OF

AFIP-(b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION

AFIP Accessions Number Sequence
(b)(6)

Name
ABD AL RAZAK, RIADH M.

SSAN: **Autopsy:** (b)(6)
Toxicology Accession #: (b)(6)
Date Report Generated: June 30, 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS **REPORT OF TOXICOLOGICAL EXAMINATION**

Condition of Specimens: GOOD
Date of Incident (b)(6) 2004 **Date Received:** 6/22/2004

VOLATILES: The **HEART BLOOD AND URINE** were examined for the presence of ethanol at a cutoff of 20 mg/dL. No ethanol was detected.

CYANIDE: There was no cyanide detected in the heart blood. The limit of quantitation for cyanide is 0.25 mg/L. Normal blood cyanide concentrations are less than 0.15 mg/L. Lethal concentrations of cyanide are greater than 3 mg/L.

DRUGS: The **HEART BLOOD** was screened for amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

None were found.

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Rockville, MD 20850
1-800-944-7912

AUTOPSY EXAMINATION REPORT

Name: BTB Altia, Abdul K.
Prisoner #(b)(6)
Date of Birth: BTB 1940
Date of Death: BTB (b)(6) 2004
Date of Autopsy: 1 June 2004
Date of Report: 29 Jun 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: CIV
Place of Death: Abu Ghraib Prison
Place of Autopsy: BIAP Morgue

Circumstances of Death: This male died while in US custody in Abu Ghraib prison. By report he complained of chest pain to his son and then collapsed.

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

Identification: By CID, DNA sample obtained

CAUSE OF DEATH: Atherosclerotic cardiovascular disease (ASCVD)

MANNER OF DEATH: Natural

FINAL AUTOPSY DIAGNOSES:

I. Atherosclerotic cardiovascular disease
   A. Left anterior descending coronary artery with multifocal stenoses ranging from 50-80%
   B. Right coronary artery with multifocal stenoses ranging from 50-85%
   C. Left circumflex coronary artery with focal 50% stenosis
   D. Moderate to severe atherosclerosis of the distal aorta
   E. Thickening of the mitral valve leaflets
   F. Pulmonary congestion (right 800 grams, left 650 grams)
   G. Prominent facial suffusion
   H. Bilateral earlobe creases (Frank's sign)

II. Pleural adhesions
III. Status post appendectomy, remote
IV. Fractures of the anterior ribs (right #5, left #3-7) consistent with cardiopulmonary resuscitation
V. No significant trauma
VI. Toxicology negative

EXTERNAL EXAMINATION

The body is that of a thin male appearing greater than 50 years of age and measuring 69 inches in length and weighing approximately 160 pounds. Lividity is posterior, purple, and fixed. Rigor is passing.

The scalp is covered with gray hair in a normal distribution. There is a gray mustache and beard. Corneal clouding obscures the irides and pupils. The external auditory canals are unremarkable. The ears are significant for bilateral creases of the earlobes (Frank's sign). There is prominent facial suffusion. The nares are patent and the lips are atraumatic. The nose and maxillae are palpably stable. The teeth appear natural with partial upper plates.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. The abdomen is flat. The genitalia are those of a normal adult male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric and without clubbing or edema.

Identifying marks and scars include a 3 ½ inch oblique scar on the right lower quadrant of the abdomen. On the posterior right arm and forearm is a 6 x 3 ½ inch area of depigmentation of the skin and scar. On the midline of the lower back is a ½ inch scar.

There is early decomposition consisting of skin slippage and vascular marbling.

CLOTHING AND PERSONAL EFFECTS

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

- Brown shirt
- Gray underpants
- Gray t-shirt
- White shirt

MEDICAL INTERVENTION

- Endotracheal tube in the oropharynx that enters the trachea
- Intravenous catheter (IV) in the back of the left hand
- Electrocardiograph (EKG) pads on the chest

RADIOGRAPHS

A complete set of postmortem radiographs is obtained and demonstrates the following:
No radiopaque projectiles or foreign matter

EVIDENCE OF INJURY

There are fractures of the right 5th and left 3rd-7th ribs on the anterior aspects.

INTERNAL EXAMINATION

HEAD:
The galeal and subgaleal soft tissues of the scalp are free of injury. The calvarium is intact, as is the dura mater beneath it. Clear cerebrospinal fluid surrounds the 1250 gm brain, which has unremarkable gyri and sulci. Coronal sections demonstrate sharp demarcation between white and grey matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum, and arterial systems are free of injury or other abnormalities. There are no skull fractures. The atlanto-occipital joint is stable.

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

The cervical spine is intact and there is no paraspinous muscular hemorrhage.

BODY CAVITIES:
The sternum and vertebral bodies are visibly and palpably intact. No excess fluid is in the pleural, pericardial, or peritoneal cavities. The organs occupy their usual anatomic positions.

There are fractures of the anterior left ribs 3-7 and the right 5th rib on the anterior aspect.

RESPIRATORY SYSTEM:
There are dense fibrous adhesions of both pleural cavities. The right and left lungs weigh 800 and 650 gm, respectively. The external surfaces are deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:
The 400 gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show 50-80% multifocal stenoses of the left anterior descending coronary artery, focal 50% calcific stenosis of the left circumflex coronary artery, and 50-75% multifocal stenoses of the right coronary artery with a focal 85% stenosis. The myocardium is homogenous, red-brown, and firm. The mitral valve is thickened and fibrotic but there are no vegetations. The remaining valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.4 and 0.4 cm thick, respectively. The endocardium is smooth and glistening. The aorta has moderate to severe atherosclerosis and gives rise to three intact and patent arch vessels. The renal and mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 1800 gm liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains a minute amount of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 200 gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

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

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

GENITOURINARY SYSTEM:
The right and left kidneys weigh 175 and 200 gm, respectively. The external surfaces are intact and smooth. The cut surfaces are red-tan and congested, with uniformly thick cortices and sharp corticomedullary junctions. The pelves are unremarkable and the ureters are normal in course and caliber. White bladder mucosa overlies an intact bladder wall. The bladder contains approximately 10 ml of cloudy urine. The prostate is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

GASTROINTESTINAL TRACT:
The esophagus is intact and lined by smooth, grey-white mucosa. The stomach contains approximately 50 ml of dark green liquid. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is surgically absent.

ADDITIONAL PROCEDURES

- Documentary photographs are taken by (b)(6)
- Specimens retained for toxicologic testing and/or DNA identification are: blood, urine, spleen, liver, lung, kidney, adipose, brain, bile, gastric, and psoas
- The dissected organs are forwarded with the body
- Personal effects are released to the appropriate mortuary operations representatives

MICROSCOPIC EXAMINATION

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

TOXICOLOGY

Toxicologic analysis of blood and bile was negative for ethanol and drugs of abuse. Cyanide was not detected.

OPINION

This elderly Iraqi male died of atherosclerotic cardiovascular disease (blockage of the arteries that supply blood and oxygen to the heart). The rib fractures noted at autopsy are consistent with cardiopulmonary resuscitation (CPR). There was no significant trauma.

The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

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Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY REPORT

Name: Awad Al-Juwadi, Hussein
US Detainee # (b)(6)
Date of Birth (b)(6) 1929
Date of Death: (b)(6) 2004
Date of Autopsy: 18 MAY 2004
Date of Report: 18 JUN 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Iraqi National
Place of Death: Baghdad, Iraq
Place of Autopsy: LSA Anaconda Mortuary, Balad Iraq

Circumstances of Death: This 75 year old male, an Iraqi National, was a detainee at the Central Baghdad Detainee Facility (Abu Ghraib). On (b)(6) 2004 he reportedly abruptly collapsed and became unconscious. Resuscitation was initiated and continued during transport to the facility hospital where he died. According to records provided by the investigative agency, (b)(6) had a past medical history significant for diabetes mellitus, hypertension and previous myocardial infarction.

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

Identification: Presumptive identification accomplished by comparison to photographs and reports supplied by the investigative agency (b)(2) CID, LSA Anaconda, Balad, Iraq)

CAUSE OF DEATH: **Severe Atherosclerotic Cardiovascular Disease**

MANNER OF DEATH: **Natural**

FINAL AUTOPSY DIAGNOSES:

I. Severe Atherosclerotic Cardiovascular Disease
- **a. Right Coronary Artery: 95% to pinpoint stenosis**
- **b. Left Coronary Artery: 80% stenosis with concentric calcification**
- **c. Proximal Left Descending Coronary Artery: 90% stenosis**
- **d. Status Post Remote Posterior Left Septal Infarction**
- **e. Severe Aortic Atherosclerosis**

II. Aortic Aneurysm (8cm)

III. Cardiomegaly (810gm)

IV. Marked Nephrosclerosis

V. No external injuries noted

VI. Toxicology: negative for drugs of abuse and ethanol

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished 70-inch tall, 200 pounds (estimated) Caucasian male whose appearance is consistent with the reported age of 75 years. Lividity is fixed on the posterior aspect of the body and rigor has passed. The temperature of the deceased is cold, that of the refrigeration unit.

The scalp is covered with white hair and there is frontal and occipital balding. The irides are hazel, and the pupils are round and equal in diameter. The external auditory canals are free of abnormal secretions or blood. The ears are unremarkable and they are not pierced. The nares are patent and the lips are atraumatic. The nose and maxillae are palpably stable. The deceased is edentulous.

The neck is straight, and the trachea is midline and mobile. The chest is symmetric. The abdomen is mildly protuberant. The genitalia are those of a normal adult circumcised male. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The buttocks and anus are unremarkable.

The upper and lower extremities are symmetric and without evidence of clubbing, edema, and injuries. A well-circumscribed, ¼-inch verrucoid lesion is noted on the posterior-medial aspect of the mid right leg.

Tattoos are not present and scars are noted in the following locations:

- An oblique 1 ¾ x 1/16-inch well-healed scar is on the dorsal aspect of the left hand
- A vertical ¾ x ¼-inch well-healed scar is inferior to the left knee
- An ovoid ¼ x ½-inch well-healed scar is inferior to the right knee
- An oblique 1 x 1/8-inch well healed scar is on the anterior aspect of the left ankle

CLOTHING AND PERSONAL EFFECTS

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

- A long sleeved dark green shirt without a label
- Black briefs
- Additional items or personal effects are not present

MEDICAL INTERVENTION

Electrocardiogram monitor pads are affixed to the anterior aspect of the chest. Puncture marks consistent with intravenous devices are noted in the left antecubital fossa and right aspect of the groin.

EVIDENCE OF INJURY

None

INTERNAL EXAMINATION

HEAD:
The galeal and subgaleal soft tissues of the scalp are free of injury. The calvarium is intact, as is the dura mater beneath it. The brain weighs 1500 gm and has unremarkable gyri and sulci. Coronal sections demonstrate sharp demarcation between white and grey matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, and cerebellum are free of injury or other abnormalities. Mild atherosclerosis (20-30%) is noted in the basilar artery; otherwise the remainder of the arterial system is free of abnormalities. There are no skull fractures. The atlanto-occipital joint is stable.

NECK:
The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage. The thyroid cartilage and hyoid bone are intact. The larynx is lined by intact 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.

BODY CAVITIES:
The ribs, sternum, and vertebral bodies are visibly and palpably intact. No excess fluid is in the pleural, pericardial, or peritoneal cavities. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs are edematous and weigh 800 and 820 gm, respectively. There is prominent anthracotic pigment deposition on the pleura as well as throughout the lung parenchyma. The external surfaces are otherwise deep red-purple. The pulmonary parenchyma is diffusely congested and edematous and exudes edema fluid on cut sections. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:
There is marked enlargement of the heart. The heart weighs 820 gm. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show severe atherosclerosis. The proximal aspect of the left coronary artery show 80% calcific concentric stenosis; the proximal left anterior descending coronary artery shows 90% stenosis. The right coronary and circumflex arteries show 30-50% stenosis. The myocardium is red-brown and flaccid. The walls of the left and right ventricles measure 1.1 and 0.3-cm, respectively. Cut sections of the left ventricle show a 2 x 1 cm area of fibrosis on the posterior-septal left ventricular wall consistent with remote myocardial infarction. The valve leaflets are thin and mobile. The proximal aorta is involved by an

8 cm aneurysm. Prominent calcific atherosclerosis of the abdominal aorta obscures the origins of the renal and mesenteric vessels.

LIVER & BILIARY SYSTEM:
The 1900 gm liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains 23 ml of green-black bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 240 gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

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

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

GENITOURINARY SYSTEM:
The right and left kidneys weigh 120 gm, each. The external capsules are removed with great difficulty from the underlying granular, dusky, cortical surfaces of the kidneys. Both kidneys demonstrate scattered cortical cysts ranging in size from ½ to ¾ cm. The cut surfaces are tan-brown and congested with poor demarcation of the cortico-medullary junctions. The pelves are unremarkable and the ureters are normal in course and caliber. The bladder is intact and empty. The prostate gland is normal in size with lobular yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

GASTROINTESTINAL TRACT:
The esophagus is intact and lined by smooth, grey mucosa. The stomach contains 400 ml of partially digested food including corn and beans. The gastric wall is intact. The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

ADDITIONAL PROCEDURES

- Documentary photographs are taken by (b)(6)
- Attending the autopsy are SA (b)(6) (b)(2) detachment CID
- Specimens retained for toxicologic testing and/or DNA identification are: brain, liver, spleen, psoas muscle, kidney, lung, vitreous fluid, blood, stomach contents, and bile
- The dissected organs are forwarded with body

- Personal effects are released to the appropriate mortuary operations representatives

MICROSCOPIC EXAMINATION

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

TOXICOLOGY

AFIP Accession Number: (b)(6) Dated 7 June 2004
Volatiles: Blood and Bile- No ethanol detected
Cyanide: Blood- no cyanide detected
Drugs: Blood- no drugs of abuse detected, positive for atropine (a resuscitation medication)

OPINION

This 75-year-old man, (b)(6) and Iraqi National detained at the Baghdad Central Detention Facility died of severe atherosclerotic cardiovascular disease. His condition was complicated by marked cardiomegaly.
The manner of death is Natural.

(b)(6)

Medical Examiner

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

REPLY TO ATTENTION OF

AFIP (b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION
AFIP Accessions Number Sequence
(b)(6)

Name
AWADAL-JAWADI, HUSSEIN

SSAN: Autopsy: (b)(6)
Toxicology Accession #: (b)(6)
Date Report Generated: June 7, 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS REPORT OF TOXICOLOGICAL EXAMINATION

Condition of Specimens: GOOD
Date of Incident: (b)(6) 2004 **Date Received:** 5/27/2004

VOLATILES: The **BLOOD AND BILE** were examined for the presence of ethanol at a cutoff of 20 mg/dL. No ethanol was detected.

CYANIDE: There was no cyanide detected in the blood. The limit of quantitation for cyanide is 0.25 mg/L. Normal blood cyanide concentrations are less than 0.15 mg/L. Lethal concentrations of cyanide are greater than 3 mg/L.

DRUGS: The **BLOOD** was screened for acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, 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 Atropine: Atropine was detected in the blood by gas chromatography and confirmed by gas chromatography/mass spectrometry.

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FINAL AUTOPSY REPORT

Name: Mohamed Ali, Farhad
Alternate spellings: (b)(6)
Date of Birth: unknown
Date of Death: (b)(6) 2004
Date of Autopsy: 26 April 2004
Date of Report: 22 November 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Civilian, Iraqi National
Place of Death: Mosul, Iraq
Place of Autopsy: Mosul, Iraq

Circumstances of Death: This approximately 27 year-old male civilian, presumed Iraqi national, died in US custody approximately 72 hours after being apprehended. By report, physical force was required during his initial apprehension during a raid. During his confinement, he was hooded, sleep deprived. and subjected to hot and cold environmental conditions, including the use of cold water on his body and hood.

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

Identification: Visual, per detention facility records: postmortem fingerprints and DNA profile obtained

CAUSE OF DEATH: Undetermined

MANNER OF DEATH: Undetermined

FINAL AUTOPSY DIAGNOSES:

I. Evidence of restraint
   a. White plastic "Flexcuffs" around each wrist
   b. Abrasions and contusions around wrists

II. Evidence of injury
   a. Minor abrasions and contusions of extremities
   b. Laceration above right eyebrow, 1 cm
   c. Contusion of right side of neck
   d. Minor abrasions of left side of forehead
   e. Subgaleal hemorrhage of bilateral frontal regions of scalp
   f. Intramuscular hemorrhage of anterior aspect of right shoulder
   g. No internal evidence of trauma

III. No evidence of significant natural disease within the limitations of the examination
   a. Cardiovascular System: No specific pathologic changes (AFIP Cardiovascular Pathology consultation)
      i. Heart weight, 450 gm
      ii. Histologically, left ventricular myocyte hypertrophy with focal mild subendocardial interstitial fibrosis
      iii. Contraction band necrosis, anterior right ventricle
      iv. Mildly thickened intramural coronary arteries
      v. Mild medial thickening of the sinus nodal artery
      vi. Focal mild dysplasia of penetrating branches of the AV nodal artery without increased fibrosis in the crest of the ventricular septum
   b. Neuropathology System: (AFIP Neuropathology Consultation)
      i. Cerebral edema, brain 1400 gm
      ii. Early acute neuronal injury
   c. Liver (AFIP Hepatic Pathology Consultation)
      i. Microvesicular steatosis, etiology undetermined
      ii. Marked congestion, likely agonal
   d. Pulmonary edema; right lung 700 gm, left lung 900 gm

IV. Early to moderate decomposition
   a. Green discoloration of abdomen
   b. Focal skin slippage

V. Evidence of medical intervention
   a. Endotracheal tube in place
   b. Intravenous catheter in the left antecubital fossa
   c. Intravenous catheter in the right inguinal region
   d. Three adhesive EKG tabs on anterior torso
   e. Pulse oximeter on left index finger

f. Curvilinear abrasion on upper chest, consistent with defibrillation
g. Fractures of anterior aspect of left 3rd rib and right 2nd-4th and 6th ribs, consistent with CPR efforts

VI. Toxicology (AFIP)
a. Volatiles: Mixed volatiles consistent with postmortem production; mg/dL
    i. Blood: acetone 20, 2-propanol 7
    ii. Urine: acetone 67, 2-propanol 3
b. Drugs: Consistent with resuscitation efforts
    i. Lidocaine detected in the urine
    ii. Urine negative for other screened medications and drugs of abuse

EXTERNAL EXAMINATION

The body is that of an unclad well-developed, well-nourished male. The body weighs approximately 190 pounds, is 72" in height and appears compatible with the reported age of 27 years. The body temperature is cold, that of the refrigeration unit. Rigor has dissipated, and the body is flaccid. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure.

There is early to moderate decomposition consisting of focal skin slippage of the arms, green discoloration of the abdomen, and early corneal clouding.

The scalp is covered with dark brown hair averaging 7 cm in length. Facial hair consists of a dark mustache and dark facial stubble. The irides are brown, and the corneae are slightly cloudy. The sclerae and conjunctivae are pale and free of petechiae. The earlobes are not pierced. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal skeleton is 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 and well developed. No injury of the ribs or sternum is evident externally. The abdomen is flat and soft. Healed surgical scars are not noted. The extremities are well developed with normal range of motion. The fingernails are intact. Tattoos are not noted, and needle tracks are not observed. The external genitalia are those of a normal adult circumcised male. The testes are descended and free of masses. The pubic hair is shaved but is present in a normal distribution. The buttocks and anus are unremarkable.

A tag with the name of the decedent is secured to the right first toe.

EVIDENCE OF THERAPY

There is an endotracheal tube in place, and there are three adhesive EKG tabs on the body, two on the upper chest and one on the lower left side of the abdomen. There is an intravenous catheter in the left antecubital fossa, and there is an intravenous catheter in the right inguinal region. There is a 12 x 6 cm oval curvilinear abrasion on the upper right side of the chest, consist with defibrillation attempts. There is a pulse oximeter taped over the end of the left index finger. There are fractures of the anterior aspect of the right 3rd rib and left 2nd-4th and 6th ribs, consistent with CPR efforts.

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.

There is bilateral periorbital ecchymosis, more pronounced over the lower lids and slightly more prominent on the left side. On the left side of the forehead, there are two

diagonally oriented parallel, linear abrasions. The medial one measures 4 x 0.2 cm and the lateral one is 3 x 0.1 cm. There are multiple small, ill-defined areas of excoriation and superficial abrasion over the central forehead and bridge of the nose. There is a 1 cm laceration just above the lateral aspect of the right eyebrow. There is a 6 x 6 cm red brown contusion on the right lateral aspect of the neck, just below the angle of the mandible.

Upon reflecting the scalp, there is bilateral frontal subgaleal scalp hemorrhage. The most prominent area is 3 x 2 cm, surrounding the laceration near the left eyebrow.

There is an 8 x 1 cm faint abrasion of the anterior aspect of the right shoulder, and there is a faint 3 x 3 cm red contusion of the anterior aspect of the left shoulder. There is a 9 x 0.2 cm curved linear abrasion just to the left of the umbilicus. There is a 1 x 0.3 cm abrasion of the lower left aspect of the abdomen.

Upon opening the chest, there is intramuscular hemorrhage of the anterior aspect of the right shoulder.

There is a 12 x 8 cm area of contusion and faint abrasion on the anterior lateral aspect of the right upper arm. There is a 6 x 2 cm red contusion on the anterior medial aspect of the right upper arm. There are three ill-defined bands of erythema and red contusion over the back of the left wrist, 7 x 3 cm in aggregate.

INTERNAL EXAMINATION

BODY CAVITIES:
The body is opened by the usual thoraco-abdominal incision and the chest plate is removed. No adhesions are present in any of the body cavities. There is 100 ml of serosanguinous fluid in each pleural space. There is no significant pericardial or peritoneal fluid. All body organs are present in the normal anatomical position. The vertebral bodies are visibly and palpably intact. The subcutaneous fat layer of the abdominal wall is 2 cm thick. There is no internal evidence of blunt force or penetrating injury to the abdominal region.

HEAD: (CENTRAL NERVOUS SYSTEM)
The scalp is reflected, and no skull fractures are found. The calvarium of the skull is removed. The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage present. The leptomeninges are thin and delicate. The cerebrospinal fluid is clear. 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 revealed no lesions, and there is no evidence of infection, tumor, or trauma. The ventricles are of normal size. Transverse sections through the brain stem and cerebellum are unremarkable. The dura is stripped from the basilar skull, and no fractures are found. The atlanto-occipital joint is stable. The brain weighs 1400 grams.

NECK:
Examination of the soft tissues of the neck, including strap muscles, thyroid gland and large vessels, reveals no abnormalities. 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 and is unobstructed. The thyroid gland is symmetric and red-brown, without cystic or nodular change. There is no evidence of infection, tumor, or trauma, and the airway is patent. Incision and dissection of the posterior neck demonstrates no deep paracervical muscular injury, hemorrhage, or fractures of the dorsal spinous processes.

CARDIOVASCULAR SYSTEM:
The pericardial surfaces are smooth, glistening and unremarkable; the pericardial sac is free of significant fluid and adhesions. A moderate amount of epicardial fat is present. The coronary arteries arise normally, follow the usual distribution and are widely patent, without evidence of significant atherosclerosis or thrombosis. The chambers and valves exhibit the usual size-position relationship and are unremarkable. The myocardium is dark red-brown, firm and unremarkable; the atrial and ventricular septa are intact. The left ventricle is 1.3 cm in thickness and the right ventricle is 0.4 cm in thickness. 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 450 grams. See "Cardiovascular Pathology Report" below.

RESPIRATORY SYSTEM:
The upper airway is clear of debris and foreign material; the mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces are smooth, glistening and unremarkable bilaterally. The pulmonary parenchyma is red-purple, exuding moderate amounts of bloody fluid; no focal lesions are noted. The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 700 grams; the left 900 grams.

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 10 ml of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi. The liver weighs 1450 grams.

ALIMENTARY TRACT:
The tongue is free of bite marks, hemorrhage, or other injuries. The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and the lumen is essentially empty with only a film of mucous. The small and large bowel are unremarkable. The pancreas has a normal pink-tan lobulated appearance and the ducts are clear. The appendix is present and is 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. White bladder mucosa overlies an intact bladder wall. The urinary bladder contains 200 ml of clear, yellow urine. The prostate gland is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities. The right kidney weighs 150 grams; the left 160 grams.

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 160 grams.

ENDOCRINE SYSTEM:
The pituitary, thyroid and adrenal glands are unremarkable.

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

MICROSCOPIC EXAMINATION

HEART: See "Cardiovascular Pathology Report" below.

LUNGS: The alveolar spaces and small air passages are expanded and contain no significant inflammatory component or edema fluid. The alveolar walls are thin and slightly congested. The arterial and venous vascular systems are normal. The peribronchial lymphatics are unremarkable.

LIVER: The hepatic architecture is intact. The portal areas show no increased inflammatory component or fibrous tissue. The hepatic parenchymal cells are well-preserved with no evidence of cholestasis or sinusoidal abnormalities. See "Hepatic Pathology Report" below.

SPLEEN: The capsule and white pulp are unremarkable. There is minimal congestion of the red pulp.

TESTES: Unremarkable.

THYROID GLAND: Unremarkable.

ADRENALS: The cortical zones are distinctive, and the medullae are not remarkable.

KIDNEYS: There is moderate autolysis. The subcapsular zones are unremarkable, and the glomeruli are mildly congested without cellular proliferation, mesangial prominence, or sclerosis. There is no interstitial fibrosis or significant inflammation. There is no thickening of the walls of the arterioles or small arterial channels.

BRAIN: See "Neuropathology Report" below.

CARDIOVASCULAR PATHOLOGY REPORT

Department of Cardiovascular Pathology, AFIP:

"AFIP DIAGNOSIS: (b)(6) No specific pathologic changes

History: Arab male detainee, death in custody

Heart: 450 grams; normal epicardial fat; closed foramen ovale; normal cardiac chamber dimensions: left ventricular cavity diameter 30 mm, left ventricular free wall thickness 13 mm, ventricular septum thickness 15 mm; right ventricular dilatation: right ventricle thickness 4 mm, without gross scars or abnormal fat infiltrates; grossly normal valves and endocardium; no gross myocardial fibrosis or necrosis; histologic sections show left ventricular myocyte hypertrophy with focal mild subendocardial interstitial fibrosis; contraction band necrosis, anterior right ventricle; mildly thickened intramural coronary arteries

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

Conduction system: The sinoatrial node is histologically unremarkable, but there is mild medial thickening of the sinus nodal artery. The compact atrioventricular (AV) node shows mild fragmentation (Mahaim fibers) within the central fibrous body, but is otherwise unremarkable. The penetrating bundle is centrally located without inflammation, increased fat, vascularity or proteoglycan. The proximal bundle branches are intact and unremarkable. There is focal mild dysplasia of penetrating branches of the AV nodal artery, but no significantly increased fibrosis in the crest of the ventricular septum.

Comment: The heart weight of 450 grams may reflect some degree of left ventricular hypertrophy, depending on the subject's body weight."

NEUROPATHOLOGY REPORT

Department of Neuropathology and Ophthamic Pathology, AFIP:

"Neuropathology consult (b)(6) We reviewed the five H&E stained microscopic sections submitted in reference to this case.
Microscopic sections demonstrate multiple sections of grey and white matter, cerebellum and spinal cord/medulla. Sections show widened pericellular and perivascular spaces and

scattered neurons with cytoplasmic eosinophilia and shrunken, pyknotic nuclei, most prominent in the dentate nucleus and cerebellum. These morphologic features represent cerebral edema and early acute neuronal injury.
This material was reviewed in conference by the staff of the Department of Neuropathology and Ophthalmic Pathology."

HEPATIC PATHOLOGY REPORT

Division of Hepatic Pathology, AFIP:

"Liver: (1) Microvesicular steatosis, etiology undetermined
(2) Marked congestion

Some toxins can cause microvesicular fat, usually associated with profound metabolic disturbances, but it can also be stress-related. There is no way to distinguish between these by histology alone. The congestion is presumably agonal. There is some lipofuscin pigment in centrilobular hepatocytes, but no bile stasis. The Masson stain shows no fibrosis to suggest underlying chronic liver disease. The PASD and iron stains show no lipofuscin or hemosiderin laden macrophages to suggest hepatocellular necrosis."

ADDITIONAL PROCEDURES

- Documentary photographs are taken by OAFME photographers
- Specimens retained for toxicologic testing and/or DNA identification are: vitreous fluid, heart blood, urine, bile, spleen, liver, lung, brain, kidney, and psoas muscle
- The dissected organs are forwarded with the body

OPINION

Based on available investigation and complete autopsy examination, no definitive cause of death for this approximately 27 year-old male Iraqi civilian in US custody in Iraq could be determined. There is evidence of multiple minor injuries; however, there is no definitive evidence of any trauma significant enough to explain the death. The injuries include bilateral periorbital ecchymoses ("blackeyes"); abrasions and contusions of the face, torso, and extremities; contusion of the side of the neck; and subgaleal hemorrhage of the scalp.

There is evidence of restraint, consisting of "flexicuffs" around the wrists with associated minor contusions, and asphyxia from various means cannot be completely excluded in a restrained individual.

There are non-specific cardiac findings, including mild medial thickening of the sinus nodal artery and focal mild dysplasia of the penetrating branches of the atrioventricular nodal artery. However, there is no associated increased septal fibrosis. which can be a potential substrate for cardiac arrhythmia. There is no gross evidence of atherosclerosis of the coronary arteries. A cardiac arrhythmia related to various ion channelopathies or coronary vasospasm cannot be excluded.

The decedent was also subjected to cold and wet conditions, and hypothermia may have contributed to his death.

Therefore, the cause of death is best classified as undetermined, and the manner of death is undetermined.

(b)(6)

(b)(6) Medical Examiner

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

REPLY TO ATTENTION OF

AFIP-(b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION
AFIP Accessions Number Sequence
(b)(6)
Name
MOHAMED, FASHAD

SSAN: Autopsy: (b)(6)
Toxicology Accession #: (b)(6)
Report Date: MAY 11 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS **REPORT OF TOXICOLOGICAL EXAMINATION**

Condition of Specimens: GOOD
Date of Incident: (b)(6) 2004 **Date Received:** 5/3/2004

VOLATILES: The **BLOOD AND URINE** were examined for the presence of ethanol (cutoff of 20 mg/dL), acetaldehyde, acetone, 2-propanol, 1-propanol, t-butanol, 2-butanol, iso-butanol and 1-butanol by headspace gas chromatography. The following volatiles were detected: (concentration(s) in mg/dL)

	Acetone	2-Propanol
BLOOD	20	7
URINE	67	3

DRUGS: The **URINE** was screened for acetaminophen, amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, 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 urine by gas chromatography and confirmed by gas chromatography/mass spectrometry.

(b)(6)
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ARMED FORCES INSTITUTE OF PATHOLOGY
Office of the Armed Forces Medical Examiner
1413 Research Blvd., Bldg. 102
Rockville, MD 20850
1-800-944-7912

PRELIMINARY AUTOPSY EXAMINATION REPORT

Name: Abbas, Mohamad Abul
SSAN: Prisoner Number (b)(6)
Date of Birth: (b)(6) 1948
Date of Incident: (b)(6) 2004
Date of Autopsy: 10 MAR 2004
Date of Report: 11 MAR 2004

Autopsy No.: (b)(6)
AFIP No.: Pending
Rank: EPOW
Place of Death: Baghdad, Iraq
Place of Autopsy: Baghdad International Airport

Circumstances of Death: Circumstances of Death: This 55-year-old male Enemy Prisoner of War had a history of ischemic heart disease. His past medical history includes hypertension, hypercholesterolemia, and possibly two previous myocardial infarctions. His medications included atenolol, Zocar, and aspirin, as well as sublingual nitroglycerin as needed. On the evening of (b)(6) 2004 he complained of chest pain and shortness of breath. He was brought to the medical clinic for evaluation where he became unresponsive. Resuscitation efforts, including Advanced Cardiac Life Support at a medical treatment facility, were unsuccessful.

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

Identification: Identification is obtained by paperwork accompanying the body, including a photograph with a matching prisoner number.

CAUSE OF DEATH: Atherosclerotic Cardiovascular Disease

MANNER OF DEATH: Natural

These findings are preliminary, and subject to modification pending further investigation and laboratory testing.

PRELIMINARY AUTOPSY DIAGNOSES:

I. Atherosclerotic Cardiovascular Disease

- **A. History of ischemic heart disease**
- **B. Cardiomegaly, marked (heart weight 620 grams)**
- **C. Coronary atherosclerosis, focally severe**
- **D. Diffuse myocardial scarring**
- **E. Arterionephrosclerosis, mild**

II. Marked Pulmonary Edema

III. Remote penetrating ballistic injury of the left buttock

- **A. Entrance: Inferior-medial aspect of left buttock (scar)**
- **B. Wound Path: Skin, subcutaneous tissue, and muscle of left buttock, muscle of proximal left thigh**
- **C. Recovered: Metallic foreign body encapsulated in fibrous tissue within muscle of proximal left thigh**
- **D. Wound Direction: Left to right, back to front, and downward**

IV. Fractures of the 5th and 6th ribs on the right, associated with hemorrhage into chest wall musculature and abrasions/thermal injury of the chest (resuscitation efforts)

V. Laceration of the nose and abrasion of the right index finger

VI. Toxicology Pending

(b)(6)

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

ARMED FORCES INSTITUTE OF PATHOLOGY
Office of the Armed Forces Medical Examiner
1413 Research Blvd., Bldg. 102
Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY EXAMINATION REPORT

Name: BTB Abdullah, Saad Mohammed
SSAN: N/A
Date of Birth: BTB (b)(6) 1950
Date of Death (b)(6) 2004
Date of Autopsy: 28 FEB 2004
Date of Report: 25 JUN 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Iraqi Civilian
Place of Death: Abu Ghraib Prison
Place of Autopsy: BIAP Mortuary
Baghdad Airport, Iraq

Circumstances of Death: This believed to be 54 year old Iraqi male civilian was a detainee of the U.S. Armed Forces at Camp Ghanci, Abu Ghraib Prison, Iraq, when he was brought to the main gate unconscious by other detainees. The decedent reported an inability to urinate to medics earlier on the day of his death. When brought to the gate the other detainees reported the decedent was dizzy and nauseated prior to losing consciousness.

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

Identification: Identification is established by visual examination by CID agents.

CAUSE OF DEATH: Acute Peritonitis secondary to Perforating Gastric Ulcer.

MANNER OF DEATH: Natural

FINAL AUTOPSY DIAGNOSES:

I. Acute Peritonitis secondary to Gastric Ulcer Perforation
   A. Perforating gastric ulcer of pyloric region of the stomach associated with 900 mls of purulent ascites and fibrinous exudate on the surface of the intestines, liver and spleen.

II. Mild atherosclerosis of the right coronary artery (< 25% stenosis).

III. Dense fibrous adhesions of the left lung to the parietal pleura of the left hemithorax.

IV. Mild decomposition.

V. Toxicology is negative for ethanol, drugs of abuse and cyanide.

EXTERNAL EXAMINATION

The body is that of a well-developed 71 1/2 inch long, 185-190 pounds (estimated) male Iraqi civilian whose appearance is consistent with the reported age of 54 years. Lividity is difficult to assess because of dark skin pigmentation and early decomposition. Rigor is easily broken, and the temperature is ambient. Marbling of the skin of the arms, abdomen and lower legs are consistent with early decomposition changes.

The scalp is covered with black and gray hair in a normal distribution. The irides are obscured by clouded corneas but appear dark colored and the pupils appear round and equal in diameter. The conjunctivae are free of injuries. The external auditory canals are dry and free of abnormal secretions. The left ear is missing the top portion of the helix (remote injury) and the right ear is unremarkable. The nares are patent, the nasal septum is intact and the lips are atraumatic. The nose and maxillae are palpably stable. The teeth appear natural and in fair repair.

The neck is straight. A 0.7 x 0.5 cm nevus is on the posterior neck. The trachea is midline and mobile. The chest is symmetric and free of external injuries. A 5.2 x 3.1 cm oval area of hyperpigmented skin is on the right side of the abdomen. The abdomen is flat and free of palpable masses. The genitalia are those of a normal adult circumcised male. There are multiple pink (hypopigmented) areas of skin on the glans penis. The testes are descended and free of masses. Pubic hair is present in a normal distribution. The left buttock has a 4.9 x 1.9 cm oval scar. The anus is atraumatic and has non-thrombosed external hemorrhoids.

The upper and lower extremities are symmetric and without clubbing or edema. The fingernails are chipping and splitting and the web spaces between the fingers and toes are free of injuries. A 9.5 x 3.5 irregular scar is on the anterior lateral aspect of the left thigh and a 5.2 x 2.2 cm scar is immediately below the left knee.

CLOTHING AND PERSONAL EFFECTS

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

The decedent was received nude for autopsy examination.

MEDICAL INTERVENTION

There are no medical appliances on the body at the time of autopsy. Cardiopulmonary resuscitation was reportedly done at the time of the decedent's collapse.

RADIOGRAPHS

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

Air under the diaphragm

No long bone fractures or foreign bodies.

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.

There are no significant injuries.

INTERNAL EXAMINATION

HEAD:
The galeal and subgaleal soft tissues of the scalp are free of injury. The calvarium is intact, as is the dura mater beneath it. Clear cerebrospinal fluid surrounds the 1450 gm brain, which is softened, discolored and has unremarkable gyri and sulci. Coronal sections demonstrate sharp demarcation between white and gray matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum and arterial systems are free of injury or other abnormalities. There are no skull fractures. The atlanto-occipital joint is stable.

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

BODY CAVITIES:
The ribs, sternum, and vertebral bodies are visibly and palpably intact. The right pleural cavity contains approximately 400 ml of bloody fluid. The pericardial sac contains approximately 30 ml of serosanguineous fluid and the peritoneal cavity contains approximately 900 ml of purulent ascites. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs each weigh 1100 gm. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. The left lung is densely adherent to the parietal pleura of entire left hemithorax. No mass lesions or areas of consolidation are present in either lung.

CARDIOVASCULAR SYSTEM:
The 475 gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show mild atherosclerosis (< 25% stenosis) of the left anterior descending branch of the left coronary artery and right coronary artery. The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.2 and 0.3-cm thick, respectively. The endocardium is smooth and

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

LIVER & BILIARY SYSTEM:
The 1275 gm liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains a minute amount of green-black bile and no stones. The gallbladder mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 175 gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

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

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

GENITOURINARY SYSTEM:
The right and left kidneys weigh 150 gm and 130 gm, respectively. The external surfaces are coarsely granular. 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 a scant amount of urine. The prostate is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

GASTROINTESTINAL TRACT:
The esophagus is intact and lined by smooth, gray-white mucosa. The stomach contains no food. A perforating ulcer, 1.5 x 1.0 cm on the mucosal surface of the stomach and 0.6 x 0.6 cm on the serosal surface, is in the pyloric region of the stomach. The greater omentum is adherent to the serosal surface of the stomach and surrounds the perforation of the stomach wall. The abdominal cavity contains approximately 900 ml of purulent ascites and fibrinous material covering the intestines, liver, and spleen.
The duodenum, loops of small bowel, and colon are unremarkable. The appendix is present.

ADDITIONAL PROCEDURES

- Documentary photographs are taken by an OAFME photographer.
- Specimens retained for toxicologic testing and/or DNA identification are: blood, spleen, liver, lung, kidney, brain, bile, gastric contents, and psoas muscle.
- The dissected organs are forwarded with body.

- Personal effects are released to the appropriate mortuary operations representatives.

MICROSCOPIC EXAMINATION

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

OPINION

This believed to be 54 year old Iraqi male died from acute peritonitis (inflammation of the abdominal cavity) that was caused by an ulcer that perforated through the stomach wall. The gastric contents and secretions spilled into the abdominal cavity causing the inflammation and infection. The decedent was most likely septic (bacteria in the blood system) and that caused his dehydration and kidney failure. His kidney failure was manifested in his inability to form urine. Kidney failure would then cause acid/base derangements, which then caused a fatal cardiac arrhythmia. The manner of death is natural.

(b)(6)

(b)(6) Examiner

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

NAME OF DECEASED *(Last, First, Middle)* Nom du décédé (Nom et prénoms)	GRADE Grade	BRANCH OF SERVICE Arme	SOCIAL SECURITY NUMBER Numéro de l'Assurance Sociale
BTB Abdullah, Saad, Mohammed		Iraq Civilian	

ORGANIZATION Organisation	NATION *(e.g., United States)* Pays	DATE OF BIRTH Date de naissance	SEX Sexe
Detainee in Iraq	Iraq	(b)(6) 1950	☑ MALE Masculin ☐ FEMALE Féminin

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

NAME OF NEXT OF KIN Nom du plus proche parent	RELATIONSHIP TO DECEASED Parenté du décédé avec le susdit
STREET ADDRESS Domicile à (Rue)	CITY OR TOWN AND STATE *(Include ZIP Code)* Ville (Code postal compris)

MEDICAL STATEMENT Déclaration médicale

CAUSE OF DEATH *(Enter only once cause per line)* Cause du décès (N'indiquer qu'une cause par ligne)		INTERVAL BETWEEN ONSET AND DEATH Intervalle entre l'attaque et le décès
DISEASE OR CONDITION DIRECTLY LEADING TO DEATH[1] Maladie ou condition directement responsable de la mort[1]	Acute Peritonitis secondary to Perforating Gastric Ulcer	
ANTECEDENT CAUSES Symptômes précurseurs de la mort	MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, s'il y a lieu, menant à la cause primaire	
	UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Raison fondamentale, s'il y a lieu, ayant suscité la cause primaire	
OTHER SIGNIFICANT CONDITIONS[2] Autres conditions significatives[2]		

MODE OF DEATH Condition de décès	AUTOPSY PERFORMED Autopsie effectuée ☑ YES Oui ☐ NO Non	CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES Circonstances de la mort suscitées par des causes extérieures
☒ NATURAL Mort naturelle	MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie	
☐ ACCIDENT Mort accidentelle		
☐ SUICIDE Suicide	NAME OF PATHOLOGIST Nom du pathologiste (b)(6)	
☐ HOMICIDE Homicide	DATE Date 28 Feb 2004	AVIATION ACCIDENT Accident d'Avion ☐ YES Oui ☑ NO Non

DATE OF DEATH *(Hour, day, month, year)* Date de décès (l'heure, le jour, le mois, l'année)	PLACE OF DEATH Lieu de décès
(b)(6) 2004	Abu Ghraib Prison, Iraq

I HAVE VIEWED THE REMAINS OF THE DECEASED AND DEATH OCCURRED AT THE TIME INDICATED AND FROM THE CAUSES AS STATED ABOVE.
J'ai examiné les restes mortels du dé funt je conclus que le décès est survenu à l'heure indiquée et à, la suite des causes énumérées ci-dessus.

NAME OF MEDICAL OFFICER Nom du médicin militaire ou du médicin sanitaire	TITLE OR DEGREE Titre ou diplômé
(b)(6)	Medical Examiner
GRADE Grade (b)(6)	INSTALLATION OR ADDRESS Installation ou adresse Dover AFB, DE 19902
DATE Date 17 MAY 04	(b)(6)

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

DD FORM 1 APR 77 2064 REPLACES DA FORM 3565, 1 JAN 73 AND DA FORM 3565-R (AAS), 24 SEP 75, WHICH ARE OBSOLETE.

ARMED FORCES INSTITUTE OF PATHOLOGY
Office of the Armed Forces Medical Examiner
1413 Research Blvd., Bldg. 102
Rockville, MD 20850
1-800-944-7912

FINAL AUTOPSY EXAMINATION REPORT

Name: BTB Ahmed, Hassan Ekab
SSAN: N/A
Date of Birth: BTB 1943
Date of Death: (b)(6) 2004
Date of Autopsy: 28 FEB 2004
Date of Report: 29 JUN 2004

Autopsy No.: (b)(6)
AFIP No.: (b)(6)
Rank: Iraqi Civilian
Place of Death: Tikrit, Iraq
Place of Autopsy: BIAP Mortuary
Baghdad Airport, Iraq

Circumstances of Death: This believed to be 61 year old male Iraqi civilian was a detainee of the U.S. Armed Forces at the Detention Central Collection Facility, Tikrit, Iraq when he was discovered deceased in his bed when he failed to report to the morning head count procedure. The decedent reported a medical history of diabetes and renal disease at the time of his capture.

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

Identification: Identification is established by visual examination by CID agents. DNA testing was performed and is on file for comparison should exemplars become available.

CAUSE OF DEATH: Atherosclerotic Cardiovascular Disease

MANNER OF DEATH: Natural

FINAL AUTOPSY DIAGNOSES:

I. Atherosclerotic Cardiovascular Disease
   1. Moderate calcified atherosclerosis of the right coronary artery (50% stenosis), the left circumflex (50% stenosis) and left anterior descending branches of the left coronary artery (50-75% stenosis).
   2. Moderate aortic atherosclerosis with bilateral renal artery take-off stenosis.
   3. Bilateral renal atrophy with intraparenchymal arteriole atherosclerosis and marked arterionephrosclerosis and cortical cysts.
   4. Cranial artery atherosclerosis of the vertebral, basilar, posterior communicating and middle cerebral arteries.

II. Mild to moderate decomposition.

III. Toxicology is positive for ethanol, acetone, 1-propanol and acetaldehyde (urine only) in the blood and urine. Drugs of abuse were not detected.

EXTERNAL EXAMINATION

The body is that of a cachetic male Iraqi national. The body weighs approximately 130 pounds, is 69 ½ inches in length and appears the reported age of 61 years. The body temperature is ambient. Rigor is present to an equal degree in all extremities. Lividity is difficult to assess because of dark skin pigmentation but is present and fixed on the posterior surface of the body, except in areas exposed to pressure. There is mild to moderate decomposition of the body with areas of skin slippage on the posterior scalp, the right wrist and anterior right lower leg and marbling of the skin of the back, buttocks, posterior surface of the arms and legs, palms of the hands and the abdomen.

The scalp hair is black and gray and the decedent has frontal baldness. Facial hair consists of a full gray and black beard and mustache. The irides are brown. The corneae are slightly cloudy. The conjunctivae are free of injuries and hemorrhages. The sclerae are free of hemorrhages. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal septum and skeleton is palpably intact. The lips are without evident injury. The teeth are natural and poor condition with multiple unrepaired caries. Examination of the neck reveals no evidence of injury. The hyoid bone and thyroid cartilage are intact.

The chest is free of injuries and deformities. A 3.3 x 1.2 cm oval scar is on the anterior left costal margin and a 3.2 x 2.3 cm oval scar is in the left upper quadrant of the abdomen. No injury of the ribs or sternum is evident externally. The abdomen is flat and free of palpable masses. The external genitalia are those of a normal circumcised adult male with bilateral descended testes. The testes are free of palpable masses. The buttocks and anus are unremarkable.

The extremities show injuries that will be described below. The fingernails are intact. An 11.5 x 4.5 cm area and an area of 7.0 x 3.0 cm of non-descript black ink writing is on the medial surface and lateral surface of the left knee, respectively. There is a paper identification tag affixed to the right wrist and right second toe.

The back has a 2.5 x 2.0 cm scar immediately right of midline in the thoracic region and a 2.5 x 2.0 cm oval scar immediately below the scar just described.

CLOTHING AND PERSONAL EFFECTS

The following clothing items and personal effects are present on the body at the time of autopsy:
A blue shirt, a green sweater, a white linen undergarment, and two white socks.

MEDICAL INTERVENTION

There is no medical intervention.

RADIOGRAPHS

Full body postmortem radiographs are obtained and demonstrates the following:
1. No long bone fractures
2. No foreign bodies

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 2.4 x 1.4 cm crusted abrasion and a 1.5 x 1.4 cm crusted abrasion are on the forehead. A 1.0 x 0.5 cm abrasion is on the nose.

On the volar surface of the right forearm are multiple oval purple contusions that average 1.0 cm in diameter. A 1.5 x 0.4 cm crusted abrasion and a 1.2 x 1.2 cm crusted abrasion are on the medial and the lateral surface of the left forearm, respectively.
On the posterior surface of the left hand are a 2.5 x 1.5 cm purple contusion and a 1.5 x 1.0 cm purple contusion. There is a 1.8 x 1.7 cm crusted abrasion with surrounding contusion on the lateral surface of the left knee and a 1.5 x 1.0 cm crusted abrasion immediately below the left patella.

Over the spinous processes of the lumbar spine is a 1.8 x 1.1 cm contusion.

INTERNAL EXAMINATION

HEAD:
The galeal and subgaleal soft tissues of the scalp are free of injury. The calvarium is intact, as is the dura mater beneath it. There is congestion and pooling of blood over the posterior aspect of the brain from livor mortis. Clear cerebrospinal fluid surrounds the 1325 gm brain, which has unremarkable gyri and sulci. The brain parenchyma is soft and pink/red from refrigeration. Coronal sections demonstrate sharp demarcation between white and grey matter, without hemorrhage or contusive injury. The ventricles are of normal size. The basal ganglia, brainstem, cerebellum, and arterial systems are free of injury or other abnormalities. There are no skull fractures. The atlanto-occipital joint is stable. There is atherosclerosis of the vertebral, basilar and middle cerebral arteries.

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 gray/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.

BODY CAVITIES:
The ribs, sternum, and vertebral bodies are visibly and palpably intact. 50 ml of serosanguineous fluid are in each hemithorax. No excess fluid is in the pericardial or peritoneal cavities. The organs occupy their usual anatomic positions.

RESPIRATORY SYSTEM:
The right and left lungs weigh 750 and 725 gm, respectively. The external surfaces are smooth and deep red-purple. The pulmonary parenchyma is diffusely congested and edematous. No mass lesions or areas of consolidation are present.

CARDIOVASCULAR SYSTEM:
The 390 gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are present in a normal distribution, with a right-dominant pattern. Cross sections of the vessels show moderate calcified atherosclerosis of the right coronary artery (50% stenosis), the left circumflex (50% stenosis) and left anterior descending branch of the left coronary artery (50-75% stenosis). The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left and right ventricles are 1.3 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 arteries have moderate stenosis of their origins at the aorta from aortic atherosclerosis. The mesenteric vessels are unremarkable.

LIVER & BILIARY SYSTEM:
The 1125 gm liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with the usual lobular architecture. No mass lesions or other abnormalities are seen. The gallbladder contains about 4 ml of green-black bile and no stones. The gallbladder mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

SPLEEN:
The 80 gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles.

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

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

GENITOURINARY SYSTEM:
The right and left kidneys weigh 55 and 60 gm, respectively. The external surfaces are coarsely granular with multiple renal cortical cysts, ranging from 0.3 –1.0 cm in diameter. The cut surfaces are dark red-tan and congested, with uniformly thick cortices and sharp corticomedullary junctions. There is marked intra-renal atherosclerosis of the arterioles of the renal parenchyma. 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 100 ml of cloudy yellow urine. The prostate is normal in size, with lobular, yellow-tan parenchyma. The seminal vesicles are unremarkable. The testes are free of mass lesions, contusions, or other abnormalities.

GASTROINTESTINAL TRACT:
The esophagus is intact and lined by smooth, grey-white mucosa. The stomach contains approximately 500 ml of brown fluid and rare food particles. The gastric wall is intact.

The greater curve of the stomach is densely adherent to the duodenum. The duodenum, loops of small bowel, and colon are otherwise unremarkable. The appendix is present.

ADDITIONAL PROCEDURES

- Documentary photographs are taken by OAFME photographer.
- Specimens retained for toxicologic testing and/or DNA identification are: blood, urine, spleen, liver, lung, kidney, brain, bile, gastric contents, and psoas muscle.
- The dissected organs are forwarded with body.
- Personal effects are released to the appropriate mortuary operations representatives.

MICROSCOPIC EXAMINATION

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

OPINION

This believed to be 61 year old Iraqi male died from atherosclerotic cardiovascular disease. The mechanism of death is often cardiac arrhythmia secondary to the diseased myocardium and conduction system. The presence of systemic atherosclerosis and the marked renal changes, including renal atrophy, is suggestive of the decedent having diabetes mellitus. The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

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

REPLY TO ATTENTION OF

AFIP: (b)(6)

TO:

OFFICE OF THE ARMED FORCES MEDICAL EXAMINER
ARMED FORCES INSTITUTE OF PATHOLOGY
WASHINGTON, DC 20306-6000

PATIENT IDENTIFICATION
AFIP Accessions Number Sequence
(b)(6)
Name
AHMED, HASSAN EKAB

SSAN: Autopsy: (b)(6)
Toxicology Accession #: (b)(6)
Report Date: MARCH 15, 2004

CONSULTATION REPORT ON CONTRIBUTOR MATERIAL

AFIP DIAGNOSIS **REPORT OF TOXICOLOGICAL EXAMINATION**

Condition of Specimens: GOOD
Date of Incident: **Date Received:** 3/3/2004

CYANIDE: There was no cyanide detected in the chest blood. The limit of quantitation for cyanide is 0.25 mg/L. Normal blood cyanide concentrations are less than 0.15 mg/L. Lethal concentrations of cyanide are greater than 3 mg/L.

VOLATILES: The **BLOOD AND URINE** were examined for the presence of ethanol (cutoff of 20 mg/dL), acetaldehyde, acetone, 2-propanol, 1-propanol, t-butanol, 2-butanol, iso-butanol and 1-butanol by headspace gas chromatography. The following volatiles were detected: (concentration(s) in mg/dL)

	Acetaldehyde	Ethanol	Acetone	1-Propanol
BLOOD		69	Trace	Trace
URINE	Trace	31	Trace	6

Trace = value greater than or equal to 1mg/dL, but less than 5 mg/dL

DRUGS: The **BLOOD** was screened for amphetamine, antidepressants, antihistamines, barbiturates, benzodiazepines, cannabinoids, cocaine, dextromethorphan, lidocaine, narcotic analgesics, opiates, phencyclidine, phenothiazines, sympathomimetic amines and verapamil by gas chromatography, color test or immunoassay. The following drugs were detected:

None were found.

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