



ARMED FORCES INSTITUTE OF PATHOLOGY
Office of the Armed Forces Medical Examiner
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 301-319-0000



AUTOPSY EXAMINATION REPORT

Name: Habib Al-Sarray, Salim Abo Alla

Autopsy No. (b)(6)

(b)(6)

AFIP No.: (b)(6)

Date of Birth: (b)(6) 1968

Rank: Civilian/Detainee

Date of Death: (b)(6) 2007

Place of Death: Iraq

Date/Time of Autopsy: 14 NOV 2007 @ 1230 hrs

Place of Autopsy: Port Mortuary, Dover AFB, Dover, DE

Date of Report: 12 February 2008

Circumstances of Death: This 38-year-old Operation Iraqi Freedom detainee, as reported, complained of malaise and was found to have a low blood pressure and high heart rate. He was transported to the ICU where he went into shock and was treated with life saving measures which were unsuccessful. He was pronounced dead on (b)(6) 2007.

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

Identification: Presumptive identification per CID investigation.

CAUSE OF DEATH: ATHEROSCLEROTIC CARDIOVASCULAR DISEASE

MANNER OF DEATH: NATURAL

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished male. The body weighs 246 pounds, is 70 inches in length and appears compatible with the reported age of 38 years. The body is cold. Rigor is present to an equal degree in all extremities. Lividity is present and fixed on the posterior surface of the body, except in areas exposed to pressure.

The head is normocephalic, and the scalp hair is black and gray. A well healed scar is on the lateral surface of the right forehead. The facial hair consists of a black beard. The irides are brown. The corneae are cloudy. The vessels of the right conjunctiva and sclera are engorged, but the left is unremarkable. The external auditory canals, external nares and oral cavity are free of foreign material and abnormal secretions. The nasal skeleton and maxilla are palpably intact. The teeth are natural and in good condition. The upper and lower frenulae are unremarkable. Examination of the neck reveals no evidence of injury.

The abdomen is protuberant. The external genitalia are those of a normal adult circumcised male. There is a 4 inch well healed scar on the left lower abdominal quadrant. On the lateral surface of the right buttock are four superficial circular healed ulcers measuring up to ¾ inches in maximum dimension. There is a ½ x ¼ x 1/8 inch anal skin tag on the twelve o'clock surface of the anus.

The extremities show no evidence of fractures, lacerations or deformities. The fingernails are intact. There are (b)(6) tattoos (b)(6)

CLOTHING AND PERSONAL EFFECTS

None identified.

MEDICAL INTERVENTION

- Endo-tracheal tube present in the mouth, resulting in a left upper lip contused laceration (measuring ½ x ¼ inches) and a contusion of the left inner lower lip (measuring 2 x 0.5 centimeters)
- Left subclavian IV-line
- Left and right antecubital fossa IV-lines with surrounding contusions measuring up to 3 inches in maximum dimension.
- Foley catheter
- Dorsal surface IV-line on the left hand with surrounding contusion measuring up to 2 inches in maximum dimension.
- There is a linear array of the minute puncture marks, about 25, located on the right upper chest below the right clavicle measuring 4 x 1 inches in area.
- Cardio-Pulmonary Resuscitation (CPR) related injuries:
 - Right anterior 2nd-5th
 - Left anterior 3rd-6th
 - There is a 5 x 5 inch contusion on the sternal surface of the chest.

RADIOGRAPHS

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

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 a 1 x 1 inch contusion near the right elbow.

There is a dry, bloodless anal laceration measuring $\frac{1}{4}$ x $\frac{1}{4}$ of an inch at the six o'clock position located $\frac{1}{4}$ of an inch from the anal verge.

There is an area of soft tissue hemorrhage measuring 3.5 centimeters in maximum dimension located along the dorsal surface of the right wrist.

INTERNAL EXAMINATION

BODY CAVITIES:

There is 50 milliliters of serosanguineous fluid in the pericardial sac. All body organs are present in normal anatomical position. There are two subcutaneous lipomas near the umbilicus and at the upper (midline region) abdominal quadrant measuring 5 x 5 x 2 centimeters and 7 x 4 x 3 centimeters, respectively.

Remote rib fractures are identified along the right lateral (1st -4th and 6th) right posterior (4th and 6th) ribs. Remote rib fractures are identified along the left lateral (3rd, 4th, and 9th) ribs.

The subcutaneous fat layer of the abdominal wall is 2 $\frac{1}{2}$ inches thick.

HEAD AND NECK:

The galena and subarea soft tissues of the scalp are free of injury. There are no skull fractures. The dura mater and falx cerebri are intact. There is no epidural or subdural hemorrhage present. The leptomeninges are thin and delicate. The cerebral hemispheres are symmetrical. The structures at the base of the brain, including cranial nerves and blood vessels are intact.

The brain weighs 1350 grams and has unremarkable gyri and sulci. Coronal sections through the cerebral hemispheres reveal no lesions. Transverse sections through the brain stem and cerebellum are unremarkable. The atlanto-occipital joint is stable.

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

CARDIOVASCULAR SYSTEM:

The heart weighs 460 grams and is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment.

The coronary arteries are present in a normal distribution, with a left-dominant pattern. Cross sections of the heart show the right coronary artery with severe, greater than 75% luminal stenosis measuring 5 centimeters from the right coronary artery orifice; the diagonal branch of the left coronary artery with severe, greater than 75% luminal stenosis near the bifurcation with the left coronary artery; and left main/anterior descending artery with moderate, greater than 50% luminal stenosis measuring 4 centimeters from the opening 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 ventricle, interventricular septum, and right ventricle are 1.5, 1.7, and 0.3 centimeter thick, respectively. The endocardium is smooth and glistening.

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

RESPIRATORY SYSTEM:

The upper airway is clear of debris and foreign material: the mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces are smooth, glistening and unremarkable bilaterally.

The pulmonary parenchyma is diffusely congested and edematous, exuding large amounts of blood and frothy fluid; no focal lesions are noted.

The pulmonary arteries are normally developed, patent and without thrombus or embolus. The right lung weighs 1080 grams; the left 1030 grams.

HEPATOBIILIARY SYSTEM:

The 2700 gram liver has an intact smooth capsule covering a yellow and fatty parenchyma with no focal lesions noted.

The gallbladder contains 10 milliliters of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent, without evidence of calculi.

GASTROINTESTINAL SYSTEM:

The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 350 milliliters of serosanguineous fluid.

The small and large bowels are unremarkable. The pancreas has a normal pink-tan lobulated appearance and the ducts are clear. The appendix is absent.

GENITOURINARY SYSTEM:

The right kidney weighs 180 grams; the left 200 grams. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, red-brown cortical surface.

The cortices are sharply delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelves and ureters are unremarkable.

Tan bladder mucosa overlies an intact bladder wall. The bladder contains approximately 15 milliliters of yellow urine. The testes, prostate gland and seminal vesicles are unremarkable. A 0.3 x 0.3 x 0.3 centimeter yellow calcified nodule is present in the urethra of the prostate gland.

LYMPHORETICULAR SYSTEM:

The 210 gram spleen has a smooth, intact capsule covering red-purple, moderately firm parenchyma; the lymphoid follicles are unremarkable.

There is an enlarged lymph node of the neck (cervical) measuring 1.4 centimeters in maximum dimension. Lymph nodes in the hilar, periaortic and iliac regions are not enlarged.

ENDOCRINE SYSTEM:

The pituitary gland is left *in situ* and is unremarkable. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The right and left adrenal glands are symmetric, with bright yellow cortices and red-brown medullae. No masses or areas of hemorrhage are identified.

MUSCULOSKELETAL SYSTEM:

A healed 4th metatarsal fracture of the right foot is identified radiologically. No non-traumatic abnormalities of muscle or bone are identified.

MICROSCOPIC EXAMINATION

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

Sections of the right coronary artery (slide 1) display severe stenosis due to atherosclerotic plaque composed of fibrin, cholesterol clefts, calcification, and a mixed inflammatory cell infiltrate.

Sections of the diagonal branch of the left coronary artery (slide 2) display only an edge of the vessel attached with fibro-adipose tissue. No pathological diagnosis identified.

Sections of the left anterior descending coronary artery (slide 3) display a tangential cross section of stenosis due to atherosclerotic plaque composed of fibrin, cholesterol clefts, calcification, and a mixed inflammatory cell infiltrate

Sections of the umbilical and abdominal masses (slides 4 and 5, respectively) display unremarkable adipocytes surrounded by congested blood vessels and a benign fibrous capsule.

Section of the bisected cervical lymph node (slide 6) displays unremarkable tissue.

Sections of the left and right lungs (slides 7 and 8, respectively) display congested blood vessels with benign alveolar and hemosiderin-laden (heart failure cells) macrophages. No frank acute or chronic inflammation, necrosis, granulomas, viral cytopathic effect, emboli, or malignancy identified.

Sections of the liver (slide 9) display severe mixed macrosteatosis and microsteatosis with chronic inflammatory cells and bile duct proliferation at the portal tracts. There is no evidence of regenerated nodules, discrete masses, granulomas, cytopathic effect, or frank inflammation identified.

ADDITIONAL PROCEDURES

1. Documentary photographs are taken by OAFME.
2. Personal effects are released to the appropriate mortuary operations representatives.
3. Specimens retained for toxicology testing and/or DNA identification are: vitreous fluid, blood, urine, bile, gastric contents, spleen, liver, lung, kidney, brain, myocardium, adipose tissue and skeletal muscle.
4. The dissected organs are forwarded with body.

FINAL AUTOPSY DIAGNOSES

- I. Atherosclerotic cardiovascular disease:**
- A. Right coronary artery, severe, greater than 75% luminal stenosis
 - B. Diagonal branch of the left coronary artery, severe, greater than 75% luminal stenosis near the bifurcation with the left coronary artery
 - C. Left anterior descending coronary artery, moderate, greater than 50% luminal stenosis
 - D. Pericardial effusion, 50 milliliters of serosanguinous fluid
 - E. Pulmonary congestion, right lung 1080 grams, left lung 1030 grams
- II. Additional findings/preexisting injuries:**
- A. Contusion of the right elbow
 - B. Postmortem laceration of the anus
 - C. Soft tissue hemorrhage of the right wrist.
 - D. Subcutaneous lipomas of the umbilicus and at the midline of the upper abdominal quadrant
 - E. Multiple superficial circular healed ulcers of the lateral surface of the right buttock
 - F. Remote/healed rib fractures, bilateral
 - G. A healed 4th metatarsal fracture of the right foot
 - H. Fatty liver change, severe
 - I. Calcified nodule in prostate
 - J. Benign cervical lymphadenopathy
 - K. Status/post appendectomy
- III. Evidence of Medical Therapy:** Described above
- IV. Identifying Body Marks**
- A. Multiple tattoos (b)(6)
 - B. Well healed scar of the left lower abdominal quadrant and right forehead
- V. Toxicology (AFIP)**
- A. VOLATILES: No ethanol detected in the blood and vitreous fluid
 - B. DRUGS: No screened drugs of abuse/medications detected in the urine

OPINION

This 38-year-old Operation Iraqi Freedom detainee died from atherosclerotic cardiovascular disease with moderate to severe narrowing (luminal stenosis of the left anterior descending, diagonal branch of the left coronary artery, and right coronary artery) of the coronary vessels and resulting in the back up of blood in the pulmonary vessels (pulmonary congestion). Additional findings at autopsy include abdominal lipomas, fatty liver change and superficial ulcers of the right buttock. The cut (laceration) and bruise (contusion) of the lips are likely due to intubation. Bruises of the chest and anterior ribs fractures were likely produced by CPR-related chest compressions. Bruises of the upper extremities are likely due to IV-line insertions to help treat the decedent's cardio-pulmonary collapse. The minute puncture marks located on the right upper chest were likely produced by multiple syringe injections of cardiac medication(s) during his emergency medical intervention. There were several healed rib fracture identified on both sides of the rib cage and right foot, the significance of these remote injuries is uncertain. Soft tissue hemorrhage to the right wrist may be due to the vigorous intervention by the emergency response team to acutely treat the detainee while he was hand cuffed. The manner of death is natural.

(b)(6)

(b)(6) Medical Examiner

(b)(6)

(b)(6) Medical Examiner

CERTIFICATE OF DEATH (OVERSEAS) Acte de décès (D'Outre-Mer)			
NAME OF DECEASED (Last, First, Middle) Nom du défunt (Prénoms) BTB Habib Al-Sarray, Salim Abo, Alfa		GRADE Grade 	BRANCH OF SERVICE Arme Civilian
ORGANIZATION Organisation CID 789236746H9B		NATION (I.e., United States) Pays Iraq	DATE OF BIRTH Date de naissance (b)(6) 1968
FACE Race X CAUCASOID Caucasien		MARRITAL STATUS État civil SINGLE Célibataire	
RELIGION Culte OTHER (Specify) Autre (Spécifier)		SEX Sexe <input checked="" type="checkbox"/> MALE <input type="checkbox"/> FEMALE	
NAME OF NEXT OF KIN Nom du plus proche parent		RELATIONSHIP TO DECEASED Rapport du défunt avec le sus	
STREET ADDRESS Domicile à (Rue)		CITY OR TOWN OR STATE (Include ZIP Code) Ville (Code postal spécifier)	
MEDICAL STATEMENT Déclaration médicale			
CAUSE OF DEATH (Enter only one cause per line) Cause du décès (Entrez une cause par ligne) Pending			INTERVAL BETWEEN ONSET AND DEATH Intervalle entre l'apparition et le décès
DISEASE OR CONDITION DIRECTLY LEADING TO DEATH Maladie ou condition directement responsable de la mort			
ANTECEDENT CAUSE Symptômes préexistants de la mort	MORIBUND CONDITION, IF ANY, LEADING TO PRIMARY CAUSE Condition morbide, si y a lieu, menant à la cause primaire		
	UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE Condition morbide, si y a lieu, menant à la cause primaire		
OTHER SIGNIFICANT CONDITIONS Autres symptômes significatifs			
MODE OF DEATH Condition de décès	AUTOPSY PERFORMED Autopsie effectuée <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Manner performed of autopsy Conditions particulières de l'autopsie	CIRCUMSTANCES SURROUNDING DEATH DUE TO INTERNAL CAUSES Circonstances de la mort survenues par ses causes internes Mode of Death: Pending	
NATURAL Mort naturelle			
ACCIDENT Mort accidentelle			
SUCIDE Suicide	NAME OF PATHOLOGIST Nom du médecin		
HOMICIDE Homicide	(b)(6)	DATE Date 14 November 2007	AVIATION ACCIDENT Accident d'avion <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
DATE OF DEATH Date de décès (b)(6) 2007	PLACE OF DEATH Lieu de décès Camp Cropper Iraq		
I HAVE VIEWED THE REMAINS OF THE DECEASED AND DEATH OCCURRED AT THE TIME INDICATED AND FROM THE CAUSES AS STATED ABOVE. J'ai examiné les restes du défunt et la cause de son décès est survenue à l'heure indiquée et à la suite des causes énumérées ci-dessus.			
NAME OF MEDICAL OFFICER Nom du médecin militaire ou du médecin civilien (b)(6)		TITLE OR RANK Titre ou grade Medical Examiner	
GRADE Grade (b)(6)		INSTALLATION OR ADDRESS Installation ou adresse Dover AFB Dover, DE	
DATE Date 11/14/2007		SIGNATURE Signature (b)(6)	

DD FORM 1300, 1 APR 72, 2064

REPLACE DA FORM 1300, 1 APR 72 AND DA FORM 1300-R (PART), 29 SEP 70, WHICH ARE OBSOLETE.

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