



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



AUTOPSY EXAMINATION REPORT

Name: Ibrahim, Sadir Ahmed

ISN: (b)(6)

Date of Birth: unknown

Date of Death: (b)(6) 2008

Date/Time of Autopsy: 20 FEB 2008 @ 0900

Date of Report: 17 MAR 2008

Autopsy No.: (b)(6)

AFIP No.: (b)(6)

Rank: Detainee

Place of Death: Iraq

Place of Autopsy: Port Mortuary,
 Dover Air Force Base, Dover, DE

Circumstances of Death: This Iraqi male was beaten by other Iraqi Nationals when they discovered him attempting to plant an Improvised Explosive Device (IED). American forces subsequently took custody of him and brought him for medical treatment. Initially, he was treated for ventricular fibrillation and hypothermia. Upon stabilization he had several complications including a decreased mental status (Glasgow Coma Scale 3), renal failure, generalized seizures, and anasarca. These conditions were considered irreversible and the decision was made to treat for comfort. Seven days after admission he developed arrhythmias, which progressed to asystole.

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

Identification: Accompanying documents establish presumptive identification; samples from fingerprint, dental, and DNA examinations obtained for positive identification.

CAUSE OF DEATH: **Complications of Blunt Force Injuries**

MANNER OF DEATH: **Homicide**

EXTERNAL EXAMINATION

The body is that of a well-developed, well-nourished Caucasoid male. The body weighs 170 pounds and measures 65 inches in length. Lividity is fixed on the posterior surfaces of the body. Rigor is passing. The body temperature is cold to touch. Decomposition changes consist of skin slippage on the lower extremities and back.

Injuries of the head are described below. The head is normocephalic. The scalp is covered with straight black hair of medium length in a normal distribution; facial hair consists of a beard and moustache. The right iris is brown, the cornea is clear, the conjunctiva is erythematous, and the sclera is yellow; the left iris is gray and scarred and the left globe is shrunken. A firm, movable nodule is palpable on the lateral aspect of the left orbit. The external auditory canals are clear. The nares contain mucus. The nose and maxillae are palpably stable. The teeth are natural and in good condition. The neck is straight, and the trachea is midline and mobile.

Injuries of the torso are described below. The chest is symmetric. The abdomen is mildly protuberant. The genitalia are those of a normal adult circumcised male. There is moderate scrotal edema. The testes are descended. Pubic hair is present in a normal distribution. The back is symmetric.

The upper and lower extremities are symmetric with mild to moderate edema of the distal portions. The fingernails are intact, except for a chip of the nail of the left ring finger. Identifying marks consist of an irregular scar (3/4" in diameter) of the dorsum of the right hand.

CLOTHING AND PERSONAL EFFECTS

No clothing items or personal effects are present on the body at the time of autopsy.

MEDICAL INTERVENTION

Medical intervention present on the body at the time of autopsy includes:

- Two fasciotomy incisions (7-3/4" and 8-3/4") on the anterior and lateral surfaces of the right leg
- Blue pad wrapped around fasciotomy incisions
- Large bore intravascular catheter, left subclavian
- Needle puncture marks, bilateral ante-cubital fossae
- Intravascular catheter, left wrist
- Three incisions (3/4" to 1" long), lateral left chest

RADIOGRAPHS

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

- Cone-shaped metal fragment on lateral aspect of the left orbit
- Fracture, left transverse process of the third lumbar vertebra
- Fracture, lateral aspect of the right sixth rib

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. Blunt force injuries

A. Head and neck

A cluster of healing abrasions, 1/8" to 1/4" in greatest dimension, covers an area of 1-1/4" x 1" on the left forehead. A 1/8" healing abrasion is on the upper lip. A 1/2" x 1/8" healing abrasion is on the left ear. A 0.5 cm contusion is on the right lateral aspect of the tongue. A 7 cm x 5 cm subgaleal hemorrhage is on the right frontal aspect of the skull. There is mild, but diffuse, subarachnoid hemorrhage.

B. Torso

Two healing contusions, 1-1/4" and 2" in greatest dimension, are on the left side of the chest. A 12" x 10" contusion extends over the left lateral torso from the lower chest to the proximal left thigh. A 2-1/2" x 2" contusion is on the right side of the back, just below the scapula. Three healing abrasions, 1/2" to 1" in greatest dimension, are on the middle of the back. A 25" x 13" contusion with hemorrhage into the underlying soft tissues involves the lower back and buttocks extending from the left scapula, around the lateral aspects of the buttocks, and down to the proximal posterior thighs. A 1/2" x 1/8" healing abrasion is on the scrotum.

The lateral aspects of right ribs five and six are fractured. The left transverse process of the third lumbar vertebra is fractured. Both testes have intraparenchymal hemorrhage.

C. Extremities

Three contusions, 1/2" to 3" in greatest dimension are on the anterior right arm. A 1/2" x 1/4" contusion is on the posterior right shoulder. A 1" x 1/4" healing abrasion is on the posterior right arm. A 1" x 1" contusion is on the posterior right forearm. A 2" x 1/8" healing contusion with focal hemorrhage into the underlying soft tissues is on the posterior right wrist.

A 1" x 1/8" healing contusion is on the anterior left shoulder. A cluster of contusions, 1/4" to 1" in greatest dimension, covers an area of 3" x 1-1/2" on the anterior left arm. A 6-1/2" x 3" contusion is on the anterior left upper extremity extending from the distal arm to the mid forearm. A 1" x 1/8" healing contusion with focal hemorrhage into the underlying soft tissues is on the posterior left wrist.

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On the antero-lateral aspect of the right thigh is an 11-1/2" x 11-1/2" contusion. A 6-1/2" x 2-1/2" healing abrasion is on the anterior right leg. Two healing abrasions, 1/4" and 1/2" in greatest dimension, are on the dorsum of the right foot. A 3" x 1" contusion with hemorrhage into the underlying soft tissues is on the right popliteal fossa. A cluster of healing abrasions and contusions with hemorrhage into the underlying soft tissues, 1/2" to 2" in greatest dimension, covers an area of 5" x 5" on the posterior right leg.

Two contusions, 2" and 3" in greatest dimension, are on the anterior left thigh. A cluster of healing abrasions, 1/8" to 3/4" in greatest dimension, covers an area of 16" x 4" on the anterior left lower extremity from the knee to the dorsum of the foot. A 4" x 2-1/2" contusion with hemorrhage into the underlying soft tissues is on the left popliteal fossa. A cluster of healing abrasions and contusions with hemorrhage into the underlying soft tissues, 1/4" to 2" in greatest dimension, covers an area of 3" x 3" on the posterior left leg. Two contusions, 1/2" and 1-1/2" in greatest dimension, are on the postero-lateral left leg.

INTERNAL EXAMINATION**HEAD AND CENTRAL NERVOUS SYSTEM:**

(See Evidence of Injury)

There are no skull fractures. The dura mater is intact with no evidence of hemorrhage. The leptomeninges are thin and delicate. The brain weighs 1270 gm and has unremarkable gyri and sulci. The cerebral hemispheres are symmetrical and the structures at the base of the brain, including the cranial nerves are intact. The cerebral arteries are patent. Coronal sections demonstrate sharp demarcation between white and gray matter, without hemorrhage or contusive injury. The ventricles are not enlarged. The basal ganglia, brainstem, and cerebellum are free of injury or other abnormalities. The atlanto-occipital joint is stable. A cone-shaped metal fragment recovered from the soft tissues of the left orbit.

NECK:

(See Evidence of Injury)

Layer-by-layer dissection of the anterior strap muscles of the neck reveals homogenous and red-brown soft tissue, without hemorrhage. The thyroid cartilage and hyoid are intact. The larynx is lined by intact white mucosa. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The parathyroid glands are not identified. The major vessels of the neck are intact.

BODY CAVITIES:

Excess sero-sanguineous fluid is present within each body cavity: 350 ml in the right pleural, 50 ml in the left pleural, 10 ml in the pericardial, and 50 ml in the peritoneal cavities. The organs occupy their usual anatomic positions. The subcutaneous fat layer of the abdominal wall is 3.5 cm thick.

MUSCULOSKELETAL:

(See Evidence of Injury)

No non-traumatic abnormalities of the muscles or bones of the appendicular and axial skeletons are identified.

RESPIRATORY SYSTEM:

The airways are clear of debris and foreign material and the mucosal surfaces are smooth, yellow-tan, and unremarkable. The right and left lungs weigh 960 and 820 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. The pulmonary arteries are normally developed and patent. The diaphragm is intact.

CARDIOVASCULAR SYSTEM:

The 450 gm heart is contained in an intact pericardial sac. The epicardial surface is smooth, with minimal fat investment. The coronary arteries are unremarkable in distribution, with a right-dominant pattern. Cross sections of the vessels show no luminal narrowing. The myocardium is homogenous, red-brown, and firm; the atrial and ventricular septae are intact. The valve leaflets are thin and mobile. The walls of the left ventricle, interventricular septum, and right ventricle are 1.4, 1.4, and 0.4-cm thick, respectively. The endocardium is smooth and glistening. The aorta gives rise to three intact and patent arch vessels; there are multi-focal thin yellow linear plaques (fatty streaking) of the descending aorta. The renal, mesenteric, and iliac vessels as well as the venae cavae are unremarkable.

HEPATOBIILIARY SYSTEM:

The 1820 gm liver has an intact, smooth capsule and a sharp anterior border. The parenchyma is tan-brown and congested, with unremarkable lobular architecture. No mass lesions or other non-traumatic abnormalities are seen. The gallbladder contains a minute amount of green-black bile and no stones. The mucosal surface is green and velvety.

LYMPHORETICULAR SYSTEM:

The 250 gm spleen has a smooth, intact, red-purple capsule. The parenchyma is maroon and congested, with distinct Malpighian corpuscles. Lymph nodes in the hilar, periaortic, and iliac regions are unremarkable.

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

GENITOURINARY SYSTEM:

(See Evidence of Injury)

The right and left kidneys weigh 210 and 170 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 and ureters are unremarkable. White bladder mucosa overlies an intact bladder wall. The bladder is empty. The prostate has lobular, yellow-tan parenchyma and is not enlarged. The seminal vesicles are unremarkable.

GASTROINTESTINAL TRACT:

The esophagus is intact and lined by smooth, gray-white mucosa. The stomach contains approximately 30 ml of pink viscous fluid. The gastric wall is intact. The duodenum, distal loops of intestine, and colon are unremarkable. The pancreas is firm and yellow-tan, with lobular architecture. Sectioning of the pancreas reveals diffuse, but mild parenchymal hemorrhage. The appendix is present.

ADDITIONAL PROCEDURES

1. Documentary photographs are taken by OAFME staff.
2. Personal effects are released to the appropriate mortuary operations representatives.
3. Specimens retained for toxicology testing and/or DNA identification are vitreous fluid, bile, blood, lung, liver, spleen, kidney, adipose tissue, heart muscle, brain, gastric contents, and psoas muscle.
4. The dissected organs are forwarded with body.
5. Trace evidence and/or foreign material are collected and retained by OAFME.

MICROSCOPIC EXAMINATION

Selected portions of organs are retained in formalin for preparation of histology slides.

Slide Key: 1- lung, interventricular septum (heart), liver; 2- lung, left free wall (heart), pancreas; 3- lung, right free wall (heart), spleen; 4- lung, left kidney, adrenal gland; 5- lung, adrenal gland, skeletal muscle; 6- right kidney, thyroid gland, tongue; 7- cerebellum; 8- midbrain; 9- brainstem; 10- hippocampus; 11- cerebral cortex

Histology:

Brain: Diffuse neuronal eosinophilia and pyknosis; mild subarachnoid hemorrhage

Tongue: no significant pathologic change

Skeletal muscle: no significant pathologic change

Lungs: multi-focal hyalinized alveolar membranes; diffuse pulmonary edema and congestion with airspace hemorrhage

Heart: no significant pathologic change

Liver: mild to moderate macro- and micro-vesicular steatosis

Spleen: no significant pathologic change

Kidneys: tubular cell necrosis, tubular casts, and mononuclear cell infiltrates

Thyroid gland: no significant pathologic change

Adrenal Glands: no significant pathologic change

Pancreas: mild autolysis, but otherwise no significant pathologic change

FINAL AUTOPSY DIAGNOSES:

- I. Blunt force injuries
 - A. Head and neck
 1. Cluster of healing abrasions, left forehead
 2. Healing abrasion, upper lip
 3. Healing abrasion, left ear
 4. Contusion, tongue
 5. Subgaleal hemorrhage, right frontal skull
 6. Diffuse subarachnoid hemorrhage
 - B. Torso
 1. Multiple (2) contusions, left chest
 2. Contusion, left lateral torso
 3. Contusion, right back
 4. Multiple (3) healing abrasions, middle back
 5. Contusion, lower back and buttocks
 6. Healing abrasion, scrotum
 7. Multiple (2) right rib fractures
 8. Fracture, left transverse process of third lumbar vertebra
 9. Bilateral intraparenchymal hemorrhage, testes
 - C. Extremities
 1. Right upper
 - a. Multiple (3) contusions, anterior arm
 - b. Contusion, posterior shoulder
 - c. Healing abrasion, posterior arm
 - d. Contusion, posterior forearm
 - e. Healing contusion, posterior wrist
 2. Left upper
 - a. Healing contusion, anterior shoulder
 - b. Cluster of contusions, anterior arm
 - c. Contusions, distal arm to mid forearm
 - d. Healing contusion, posterior wrist
 3. Right lower
 - a. Contusion, antero-lateral thigh
 - b. Healing abrasion, anterior leg
 - c. Multiple (2) healing abrasions, foot
 - d. Contusion, popliteal fossa
 - e. Cluster of abrasions and contusions, posterior leg
 4. Left lower
 - a. Multiple (2) contusions, anterior thigh
 - b. Cluster of healing abrasions, anterior knee, leg and foot
 - c. Contusion, popliteal fossa
 - d. Cluster of healing abrasions and contusions, posterior leg
 - e. Multiple (2) contusions, postero-lateral leg

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- II. Other evidence recovery
 - Cone-shaped metallic fragment from left orbit

- III. Natural disease and anatomic findings
 - A. Cardiomegaly (heart weight 450 gm; expected weight range for a 170 pound person is 305 to 375 gm)
 - B. Mild peripheral atherosclerosis
 - C. Global ischemic changes of the brain
 - D. Diffuse alveolar damage
 - E. Mild intraparenchymal hemorrhage, pancreas
 - F. Anasarca

- IV. Medical intervention
 - A. Two fasciotomy incisions, anterior and lateral right leg
 - B. Blue pad wrapped around fasciotomy incisions
 - C. Large bore intravascular catheter, left subclavian
 - D. Needle puncture marks, bilateral ante-cubital fossae
 - E. Intravascular catheter, left wrist
 - F. Three incisions, lateral left chest

- V. Post-mortem changes
 - A. Mild decomposition
 - B. Passing rigor
 - C. Fixed posterior livor

- VI. Identifying marks
 - Scar, right hand

- VII. Toxicology results
 - A. Volatiles (blood and vitreous fluid): no ethanol detected
 - B. Screened drugs of abuse and medications (blood):
 - 1. Positive benzodiazepine: Lorazepam detected in the blood at a concentration of 0.049 mg/L
 - 2. No other screened drugs of abuse or medications detected
 - C. Carbon monoxide: not tested, no suitable specimen
 - D. Cyanide (blood): none

OPINION

This Iraqi male (b)(6) died of complications of blunt force injuries. After sustaining a beating resulting in injuries to the head, torso, and extremities he developed cardiac arrhythmias, respiratory failure, renal failure, and seizures. These clinical changes were likely due to the metabolic insults sustained from the beating, however an asphyxial contribution to his death cannot be excluded. Despite initial resuscitative efforts his condition progressively worsened and he died. Toxicology tests for ethanol, cyanide, and screened drugs of abuse were negative; Lorazepam detected in the blood is consistent with medical-related and comfort-related measures. The manner of death is homicide.

(b)(6)

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