Butler County Coroner

315 High Street - Suite 650 Hamilton, Ohio 45011
Phone (513) 785-5860 Fax (513) 785-5866

*Richard P. Burkhardt, M.D.*
*Coroner*

## AUTOPSY REQUEST - CORONER

| | |
|---|---|
| **CORONER CASE NO:** | **09-598** |
| **PATIENT:** | **BOUCHER, Douglas Eugene** |
| **AGE / SEX / RACE:** | **39 / Male / Caucasian** |
| **DATE OF BIRTH:** | **April 13, 1970** |
| **DATE / TIME OF DEATH:** | **December 13, 2009 / 2349** |
| **DATE / TIME OF AUTOPSY:** | **December 14, 2009 / 1215** |
| **DATE REPORT COMPLETED:** | **February 5, 2010** |
| **PATHOLOGIST:** | **James W. Swinehart, M.D., Forensic Pathologist** |
| **AUTOPSY ORDERED BY:** | **Richard P. Burkhardt, M.D., Butler County Coroner** |
| **PATHOLOGY NO:** | **P09 227** |

**FINAL GROSS AND MICROSCOPIC DIAGNOSIS:**

1. Craniocerebral injury sustained after electro-muscular-disruption (EMD)
   - -history of striking face on curb
   - -impact area within right forehead and right periorbital area manifested by extensive skin abrasion, deep contusion and laceration
   - -fractures of orbital plates, bilateral, with extensive retro bulbar hemorrhage, right
2. Abrasions, recent, involving anterior chin
3. Missing upper central incisors due to traumatic injury
4. Patterned stun gun abrasion of anterior thorax, overlying sternum, with deep subcutaneous hemorrhage
5. Taser puncture wounds of left lateral thorax and right midback (20 inches apart)
6. Two abrasions of posterior left back associated with deep contusional subcutaneous hemorrhage
7. Recent abrasions, posterior aspect of left hand
8. Splenomegaly (weight 990 grams)
9. Hepatomegaly (weight 3950 grams)
10. Pulmonary edema, moderate (weight right lung 690 grams / weight left lung 650 grams)
11. Evidence of stasis dermatitis within right lower leg

**TOXICOLOGY:** Postmortem ethanol screen: negative
Urine drug screen: negative
Blood drug screen: Cyclobenzaprine 34.7 ng/ml. (therapeutic 3-36)

**OPINION:** In my opinion the death of Douglas Eugene Boucher is do to a craniocerebral injury sustained when striking a curb with his forehead and face following a Taser incident. Examination of the forehead and right periorbital area revealed evidence of a forceful impact with a large periorbital contusion, abrasion, and laceration of the skin. Although, no major injuries were identified within the underlying brain, there were bilateral fractures of the orbital plates within the anterior fossa as well as extensive retrobulbar hemorrhage of the right eye. Examination of the neck and cervical spinal cord revealed no injuries. Di Maio described cases following severe head trauma resulting in death without signs of significant brain trauma. The majority of his cases, however, did show significant alcohol elevation, which was not the case in this instance. DeMaio attributed the death, in these cases, to posttraumatic apnea due to concussion and alcohol intoxication. Even though the individual in question was negative for alcohol, the scene investigation revealed no response to resuscitation which was begun in a timely fashion. Therefore, my conclusion is death was due to posttraumatic concussion probably resulting in apnea. The extent of brain injury is not always visible even microscopically when death is rapid, ie., there may have very well been diffuse axonal injury due to the forceful impact. Of course, it is impossible to completely rule out a terminal cardiac arrhythmia due to the Taser. The etiology of the splenomegaly is not known.

**CAUSE OF DEATH:** Craniocerebral injury resulting in posttraumatic concussion and apnea

James W. Swinchart, M.D., Pathologist

JWS:sp

**SCENE INVESTIGATION:** The body for examination is that of a thirty-nine year-old Caucasian male who was pronounced dead at West Chester Medical Center Emergency Room. He had been in an altercation with two Mason Police Officers at the Speedway Service Station on State Route #42. After insulting the clerk, officers attempted to arrest him. There was an altercation and only one handcuff was placed on the right wrist. He struck one officer in the head with the unattached left handcuff. A Taser gun was then used and the decedent fell striking his face on the curb. He became unresponsive and a life squad was called and resuscitation attempts were made before transporting to West Chester Medical Center where he was pronounced dead.

**EXTERNAL EXAMINATION:** The body weighs 295-pounds and measures 69-inches in length. The head is normocephalic and covered by dark brown hair. The irides are green. The teeth are natural. The trachea is midline. The anterior thorax and abdomen are symmetrical. There is a 3 inch umbilical hernia. The external genitalia are unremarkable and show no injury. The extremities and back are unremarkable.

Rigor mortis is well developed at the time of examination and a lividity pattern is noted in the posterior aspects of the body.

CLOTHING: The individual is dressed in a light, black windbreaker type jacket and black undershirt. The legs are covered by black sweat pants and the underwear consisted of black briefs. Black loafer type slippers are identified on the feet. There are no socks. There is a handcuff on the right wrist which hangs loose. A handcuff has not been placed on the left wrist. Two Taser wires protrude from the body. One is within the left anterior chest and the other in the right upper back. Both of the laser barbs have penetrated the clothing and puncture the underlying skin. One canister was received with the body. The right lower leg showed extensive venous stasis and a small ulcer of the dorsal aspect of the ankle was identified measuring 1/4 inch in diameter.

EXTERNAL SIGNS OF INJURY: Examination of the face reveals a prominent abrasion of the right forehead extending upward from the orbital ridge measuring 2-3/4 x 2 inches. Beneath the abrasion there is a large hematoma. The right eyelid is swollen and the eye is closed. There is a superficial laceration between the right eyebrow, which is horizontally oriented and measures 1/2 inch in length. Blood exudes from this laceration. Extending downward onto the right maxillary area is an abrasion measuring 2-1/2 inches which does not extend to the corner of the mouth. There is an abrasion involving the right lateral nose extending to the right ala. There is also a superficial abrasion involving the bridge of the nose as well. The anterior chin contains a recent abrasion measuring 1 x 1/-14 inches. Examination of the mouth reveals intraoral blood and the two upper central incisors are completely missing and the sockets are hemorrhage indicating recent injury. The posterior aspect of the left hand, overlying knuckles 2,3,4 and 5, show evidence of recent abrasion measuring up to 1 inch in size.

*EXTERNAL SIGNS OF INJURY* (continued)
Examination of the back reveals two oval abrasions of the skin, the more superior measuring 1 x 1/2 inch and the more inferior measuring 3/4 x 1/2 inch. The abrasions are located 2-1/2 inches apart and sections through the abrasions reveal deep contusional hemorrhage within the underlying subcutaneous fat. In addition, the left lower lumbar area, laterally just above the buttocks, contains a 2 x 1/2 inch purple-gray contusion. The posterior aspect of the left leg contains a 3-1/2 x 1 inch purple-gray contusion within the calf area.

EVIDENCE OF STUN AND TASER INJURY: Within the skin of the anterior chest, overlying the sternum and 1-1/2 inches below the nipple line, is a patterned rectangular abrasion consisting of two parallel linear abrasions measuring 1-1/2 inches in length and separated by 1/2 inch of intervening skin. The superior end of the left abrasion contains a more prominent circular abrasion measuring 1/4 inch in diameter and showing a 1/2 inch purple-gray contusion of the adjacent skin. The inferior end of this abrasion also contains a punctate 1/8 inch abrasion. 1/2 inch below the two vertical abrasions just described are two parallel horizontally oriented 1/2 inch abrasions. This patterned injury is interpreted as a point of Stun Gun contact. The skin beneath this abrasion shows evidence of deep subcutaneous hemorrhage (contusion). A Taser barb is attached to the left lateral thoracic wall, 4-1/4 inches lateral to the left nipple. The Taser contact point is characterized by three parallel abrasions, each averaging 1/8 inch in size, the central abrasion appearing burnt with blackening. The second Taser puncture point is identified within the right middle back, 1/2 inch to the right of midline. This is represented by two small puncture wounds, 1/4 inch apart. Puncture wound #1 and puncture wound #2 are 20 inches apart as measured around the curvature of the body.

SIGNS OF MEDICAL INTERVENTION: There is an endotracheal tube in place. A intravenous needle is projecting from the left tibia. EKG leads are attached to the chest.

**INTERNAL EXAMINATION:** Internal examination reveals no internal signs of injury. The body cavities are free of blood and fluid. The stomach is distended with air.

GROSS ORGANS:
**ORGANS OF THE NECK:** The neck organs are examined insitu. There is no upper airway obstruction. The is evidence of endoesophageal intubation and the endotracheal tube is positioned in the esophagus. The vocal cords appear normal. There is no evidence of gastric aspiration. Examination of the cervical spine anteriorly reveals no evidence of fracture and no evidence of deep hemorrhage. The neck is also examined posteriorly and an incision from the occipital area downward to include the upper thoracic area reveals no evidence of subcutaneous hemorrhage or deep hemorrhage. The cervical spine is well aligned. There are no injuries to the hyoid bone and/or laryngeal cartilages. The thyroid gland is red-gray symmetrical and shows no gross nodularity or enlargement.

**HEART**: The heart weighs 400 grams. The pericardial sac contains the usual amount of clear yellow fluid. There is no gross evidence of pericarditis. Cross sections through the major epicardial coronary arteries reveal widely patent lumens without evidence of arteriosclerotic narrowing and/or occluding thrombi. Cross sections through the left ventricular myocardium and ventricular septum reveal questionable hemorrhage within the lateral wall of the left ventricle and this will be attempted to be confirmed microscopically. Both the left lateral free wall and ventricular septum each average 12mm in thickness. The right lateral free wall averages 2-3mm in thickness. The endocardium is smooth and glistening. No mural thrombi are identified. The cardiac valves are unremarkable. The coronary ostia are normally placed and widely patent. The ascending thoracic aorta shows no evidence of arteriosclerotic change.

**LUNGS**: The weight of the right lung is 690 grams and the weight of the left lung is 650 grams. Both lungs show their normal lobations. The visceral pleural surface of each lung is smooth, glistening and red-gray. No fibrous pleural adhesions are present. Cross sections through the lung reveal a homogeneous red-gray cut surface showing moderate congestion and edema. There is no evidence of pulmonary contusion. The trachea and bronchi are unremarkable and there is no evidence of aspirated blood. The pulmonary vessels are free of thrombi.

**LIVER**: The liver weighs 3950 grams. The capsule of the liver is smooth and glistening. The cut surface of the liver is mottled red-brown and the liver is firmer than usual in consistency. No hepatic masses are present.

**GALLBLADDER**: The gallbladder measures 3 x 2 cm and contains approximately 10cc of yellow-green viscid bile. No gallstones are present.

**SPLEEN**: The spleen is enlarged weighing 990 grams and measuring 8 x 5 x 2 inches. The spleen is very soft in consistency and the cut surface shows evidence of prominent follicles. There are no lacerations or contusions of the spleen.

**PANCREAS**: The pancreas is light tan firm and nodular and weighs 80 grams. There is no gross evidence of pancreatitis. No pancreatic masses are present.

**ADRENAL GLANDS**: The combined weight of the adrenal glands is 15 grams. Each adrenal gland has bright yellow cortex and brown medulla.

**GENITOURINARY SYSTEM**: The weight of the right kidney is 220 grams. The weight of the left kidney is 240 grams. The capsule of each kidney strips with ease revealing a smooth red-gray external cortex showing no evidence of scarring or narrowing. The renal cortex bilaterally averages 7 mm in thickness. No abnormalities of the calyces, pelves and/or ureters are noted. The urinary bladder is thin walled and contains a quantity of clear yellow urine which was negative on a rapid urine drug screen for alcohol and drugs of abuse. However a comprehensive postmortem drug screen will be performed. The urinary bladder, grossly, is unremarkable.

**GASTROINTESTINAL TRACT**: The mucosa of the esophagus is wrinkled and gray-white. The gastroesophageal junction is unremarkable. The gastric contents consist of a small quantity of tan liquid. No undigested food particles are present. The rugal pattern of the stomach is normal. The pylorus is not thickened or deformed. The remainder of the gastrointestinal tract is unremarkable. The appendix is present and normal.

**CENTRAL NERVOUS SYSTEM**: There are no lacerations or contusions of the scalp. There is no evidence of subgaleal hemorrhage other than in the right frontal area. The weight of the brain prior to formalin fixation weighs 1570 grams. There is no epidural or subdural blood. However, the parasagital overlying the cerebral cortex bilaterally contain multiple small punctate areas interpreted as subarachnoid hemorrhage. The brain in this area is red in coloration. Cross sections of the brain and brain stem reveal no areas of softening or hemorrhage. The spinal fluid is clear. The blood vessels at the base of the brain are thin and delicate and show no evidence of arteriosclerosis or aneurysm formation. Examination of the base of the skull reveals extensive fractures of both orbital plates within the anterior fossa. Beneath the fractures bilaterally are extensive retro bulbar hematomas, more marked on the right than on the left.

**BONE MARROW:** A sample of bone marrow was obtained from a left rib because of the splenomegaly observed grossly.

**CERVICAL SPINAL CORD:** The cervical spinal cord is removed intact from an anterior approach. There is no evidence of epidural, subdural, subarachnoid hemorrhage within the cervical spinal cord segment. Grossly there is no evidence of compression and/or contusion. Representative sections of the cervical spinal cord will be submitted for histologic examination.

## MICROSCOPIC:

HEART: Multiple sections of left ventricular myocardium, ventricular septum and right ventricular wall reveals no histologic abnormalities. There is no evidence of recent or remote ischemia. The intramural myocardial vessels are patent. Microscopic sections failed to reveal any areas of hemorrhage that was suspected grossly.

LUNGS: Sections of lung reveal evidence of congestion and edema.

LIVER: A random section of liver reveals evidence of mild steatosis of macrovesicular type.

SPLEEN: unremarkable

PANCREAS: unremarkable

ADRENAL GLANDS: unremarkable

BRAIN: unremarkable

SPINAL CORD: unremarkable

SKIN: Sections of skin from the anterior thorax, where the stun gun was applied, reveals deep subcutaneous hemorrhage. The hemorrhage extends into the subcutaneous fat. Microscopic sections of the Taser puncture wound on the thorax reveals evidence of thermal injury involving the overlying epidermis.

# Butler County Coroner

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*Richard P. Burkhardt, M.D.*
*Coroner*

DATE October 25, 2010

To: Mannion & Gray Co., LPA

(FAX: (216) 344-9421

➜ ATTENTION: John W. Burnett

FROM: Butler County Coroner Office

RE: AUTOPSY Report - BOUCHER, Douglas E. (C#09-598)

# OF PAGES - INCLUDING COVER 9

RESPONSE REQUESTED *YES _____
*NO _____
(unless you have questions)

TRANSMITTED BY: Norma Sechrist

(per the request of) _____

**Butler County Coroner**

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Richard P. Burkhardt, M.D.
*Coroner*

October 25, 2010

Mannion & Gray Co., LPA
Attn: John W. Burnett
1375 East Ninth Street, Su. 1600
CLEVELAND OH 44114

Dear Mr. Burnett,

Attached is the information you requested regarding, BOUCHER, Douglas Eugene (#09-598) date of death December 13, 2009. Charges for these reports are as follows:

(0) Coroner's Report . . . . . $10.00 each copy
(1) Autopsy Report . . . . . $25.00 each copy

The total amount due is $ 25.00 and payment should be made payable to the Butler County Coroner's Office at the above address.

Sincerely yours,

Norma Sechrist

Norma Sechrist, Office Secretary
Richard P. Burkhardt, M.D.
Coroner of Butler County, OH

***Truth and Compassion***