

Autopsy Report  
for  
Dawn Brancheau

**OFFICE OF THE MEDICAL EXAMINER  
DISTRICT NINE  
2350 E. Michigan Street  
Orlando, Florida 32806-4939**

**REPORT OF AUTOPSY**

**DECEDENT:** DAWN BRANCHEAU      **CASE NUMBER:** ME 2010-000248

**MANNER OF DEATH:** Accident      **IDENTIFIED BY:** Jan Topoleski

**AGE:** 40 years

**SEX:** Female

**RACE:** White

**DATE OF DEATH:** February 24, 2010

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**DATE/TIME OF AUTOPSY:** February 25, 2010 at 8:20 a.m.



**PERFORMED BY:** Joshua D. Stephany, MD, Associate Medical Examiner

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**CAUSE OF DEATH:** Drowning and traumatic injuries

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**AUTOPSY FINDINGS**

- I. 40 year old white female, animal trainer, attacked by a killer whale (*Orcinus orca*) at work
- II. Blunt force injuries of the head and neck:
  - A. Avulsion of the scalp and associated galeal and subgaleal hemorrhage
  - B. Lacerations of the right ear
  - C. Abrasions of the left cheek
  - D. Fracture of the mandible, with associated laceration and hemorrhage of the oral mucosa
  - E. Fracture of the 7<sup>th</sup> cervical vertebra, with associated hemorrhage of the paravertebral musculature, epidural hemorrhage, and softening of the underlying spinal cord

continued...

- III. Blunt force injuries of the torso:
  - A. Abrasions of the left upper back
  - B. Fractures of the posterior aspects of the 9<sup>th</sup> through 11<sup>th</sup> left ribs
  - C. Fracture of the sternum at the level of the 2<sup>nd</sup> rib insertion
  - D. Liver lacerations
  - E. Hemoperitoneum (500 ml)
  
- IV. Blunt force injuries of the extremities:
  - A. Abrasions, lacerations, and contusions of the extremities
  - B. Complete avulsion of the left upper extremity with associated fracture of the proximal left humerus
  - C. Dislocation of the left elbow.
  - D. Dislocation of the left knee
  
- V. Evidence of drowning:
  - A. Approximately 4 ml of fluid in the sphenoid sinus

**TOXICOLOGY ANALYSIS:** See laboratory report.

**CONCLUSION:** In consideration of the circumstances surrounding the death, and after examination of the body, and toxicology analysis, it is my opinion that the death of Dawn Brancheau, a 40 year old white female, is the result of drowning and traumatic injuries.

The manner of death is accident.

BRANCHEAU, DAWN  
ME 2010-000248  
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The autopsy of the body of Dawn Brancheau is performed pursuant to Florida Statute 406.11 by Joshua D. Stephany, MD, Associate Medical Examiner, District Nine at the Orange County Medical Examiner facility, Orlando, Florida on February 25, 2010 at 8:20 a.m.

**IDENTIFICATION:** The body of Dawn Brancheau is identified by a friend and coworker, Jan Topoleski. The identification is made to Deputy Christian Vonberger of the Orange County Sheriff's Office on February 24, 2010 at 2:19 p.m., at the scene.

**CLOTHING AND VALUABLES:** At the time of examination, the decedent is dressed in a black and white wet-suit which is cut down the midline of the front, a black bathing suit which is cut down the front, and black socks. A yellow metal ring is on the 5<sup>th</sup> digit of the left hand. Received with the body are black footwear and a whistle attached to a white rope. The oral cavity contains two clear/transparent orthodontic alignments with the inscriptions "Invisalign, 377171, LON and 377171 U06N".

**GENERAL STATEMENT:** The body is that of a well-developed, well-nourished, approximately 69 inch, 123 lb, adult, white female consistent with the reported age of 40 years. Also received with the body is a portion of the scalp with attached hair and a fragment of red-pink muscle.

#### **EXTERNAL EXAMINATION**

The scalp is covered by up to 43 cm long, brown hair. The irides are green/hazel and the sclerae are white. The conjunctivae have no petechiae. Both earlobes are pierced once. The external nose has no trauma and the nasal septum is intact. The teeth are natural and in adequate condition.

The torso has no congenital deformities, scars, or tattoos. The breasts are symmetric, equal, and have no palpable masses. The external genitalia are those of an adult female. The anus is normal.

The extremities have no congenital deformities, scars, or tattoos.

### **EVIDENCE OF MEDICAL INTERVENTION**

Defibrillator pads are on the right chest and left lateral chest.

### **EVIDENCE OF INJURY**

#### **Blunt force injuries of the head and neck:**

The scalp is completely avulsed from the head, inferior to the eyebrows anteriorly, to the mid portion of the ears laterally, and to the hairline posteriorly. Diffuse galeal and subgaleal hemorrhage associated with the avulsion is around the outer table of the skull and calvaria. The superior right ear is lacerated. A 3 x 3 cm abrasion is on the left cheek. A 3 x 1 cm abrasion is on the posterior inferior left cheek at the jaw line. A 1 x 0.2 cm abrasion is on the superior left nose. The mandibular jaw is fractured between the left lateral incisor and left canine with associated laceration and hemorrhage of the oral mucosa. The 7<sup>th</sup> cervical vertebral body is fractured, with associated epidural hemorrhage, paravertebral hemorrhage of the adjacent musculature, and softening of the underlying spinal cord. Subdural hemorrhage around the cervical spinal cord is absent.

#### **Blunt force injuries of the torso:**

Two 1 cm abrasions are on the left upper back adjacent to the posterior midline. The posterior aspects of the 9<sup>th</sup> through 11<sup>th</sup> left ribs are fractured. The sternum is fractured at the level of the 2<sup>nd</sup> rib insertion. The abdominal cavity contains approximately 500 ml of blood. The posterior inferior liver is lacerated between the right and left lobes.

#### **Blunt force injuries of the extremities:**

A 3 x 1 cm contusion is on the right elbow. A 2 x 2 cm contusion is on the ventral left upper arm superior to the antecubital fossa. A 0.5 cm laceration and associated surrounding pink contusion is on the ventral surface of the left forearm. A 3 cm laceration is on the left forearm. A 2 x 2 cm contusion is on the ventral left wrist. A 2 x 2 cm contusion is on the posterior left elbow.

A 4 x 1 cm contusion is on the dorsal left forearm. A 3 x 1 cm contusion is on the dorsal left forearm. A 1 x 1 cm contusion is on the dorsal left wrist. The left upper extremity is completely avulsed, with an associated fracture of the proximal left humerus and exposed, lacerated musculature and soft tissue. The left elbow is dislocated.

A 1 cm laceration is on the left shin. A 2 x 1 cm abrasion is on the medial left ankle. A 2 x 0.5 cm contusion is on the medial left foot. A 1 cm laceration is on the dorsal left calf. The left knee is dislocated.

**Evidence of Drowning:**

The sphenoid sinuses contain approximately 4 ml of fluid.

**INTERNAL EXAMINATION**

The pleural cavities and pericardial sac have no excess fluid or adhesions. The peritoneal cavity has no adhesions.

**CARDIOVASCULAR SYSTEM:** The heart is 260 grams and has a normal distribution of epicardial fat. The coronary arteries are patent. The right coronary artery is dominant. The myocardium is tan-red, firm, and has no scars. The left ventricle is 1 cm thick and 2 cm in internal diameter. The right ventricle is 0.3 cm thick and 3 cm in internal diameter. The tricuspid, pulmonary, mitral, and aortic valves are thin, pliable, and have no vegetations. The aorta is elastic and has a smooth intimal lining.

**RESPIRATORY SYSTEM:** The right lung is 550 grams and the left lung is 510 grams. The pleural surfaces are pink to dark red, smooth, and glistening. The lung parenchyma is pink to dark red, firm, and congested. The larynx and trachea are patent and have tan, intact mucosa. The pulmonary vessels are patent.

**HEPATOBIILIARY SYSTEM:** The liver is 1350 grams and has a smooth, tan-brown capsule. The parenchyma is tan-brown and soft. The gallbladder contains approximately 5 ml of dark green, viscous bile and no choleliths. The gallbladder mucosa is dark green and velvety.

**RETICULOENDOTHELIAL SYSTEM:** The spleen is 160 grams and has a purple, finely wrinkled, and intact capsule. The parenchyma is dark red and soft. The cervical, mediastinal, and abdominal lymph nodes are not enlarged.

**GASTROINTESTINAL TRACT:** The tongue has no bite marks or hemorrhage. The esophagus is lined by tan, intact mucosa. The serosa of the stomach is tan-grey and glistening. The stomach contains approximately 20 ml of tan mucoid fluid. The gastric mucosa is tan, has unremarkable rugal folds, and is intact. The external surfaces of the intestines are tan-grey and have no palpable masses. The vermiform appendix is tan-grey and glistening.

**GENITOURINARY SYSTEM:** The right kidney is 90 grams and the left kidney is 90 grams. The capsules are adhered to dark red, smooth cortical surfaces. The parenchyma is dark red and has well-defined corticomedullary demarcation. The ureters have a normal course and caliber. The urinary bladder is empty and has a tan, trabeculated, and intact mucosa. The uterus, fallopian tubes, and ovaries, are unremarkable.

**ENDOCRINE SYSTEM:** The adrenal glands have well-demarcated, thin, golden yellow cortices and brown medullae. The pancreas is tan and lobular. The thyroid gland is tan, uniform, and not enlarged.

**NECK:** A layer-by-layer dissection of the anterior musculature of the neck reveals no hemorrhage. The hyoid bone and thyroid cartilage are intact.

**HEAD:** The skull has no fractures. The brain is 1210 grams. Epidural and subdural hemorrhage are absent. The leptomeninges are thin, transparent and have no subarachnoid hemorrhage or exudate. The vessels at the base of the brain are normally formed and are patent. The cerebral hemispheres are symmetric and the gyri are flattened and the sulci are effaced. Coronal sections of the cerebrum and transverse sections of the cerebellum and brainstem reveal no neoplasm, hemorrhage, or necrosis.

JDS/lmc

RUN DATE: 03/16/10  
RUN TIME: 1243

WUESTHOFF REFERENCE LABORATORY  
6800 Spyglass Court  
Melbourne, Fl 32940

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PATIENT: MEO10-248 BRANCHEAU, DAWN      ACCT #: Q01449933      LOC: MEO      U #: 0001366133  
SSN #:      AGE/SX: 40/F      STATUS: REG REF      REG: 02/26/10  
REG DR: STEPHANY, JOSHUA M.D      DISCHARGE DATE:

Test	Result	Cutoff Conc mg/L
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BLOOD DRUG SCREEN

SPECIMEN TYPE      HEART BLOOD

GC/MS

NO DRUGS DETECTED

LC/MS/MS AND IMMUNOASSAY SCREEN PERFORMED ON PERIPHERAL BLOOD

LC/MS/MS

NO DRUGS DETECTED

IMMUNOASSAY SCREEN

AMPHETAMINES	NEGATIVE	0.100
BARBITURATES	NEGATIVE	0.100
BENZODIAZEPINES	NEGATIVE	0.100
CANNABINOIDS	NEGATIVE	0.050
COCAINE METAB	NEGATIVE	0.100
FENTANYL	NEGATIVE	0.001
METHADONE	NEGATIVE	0.050
OPIATES	NEGATIVE	0.050
TRICYCLICS	NEGATIVE	0.100
SALICYLATES	NEGATIVE	50.0

VOLATILES

SPECIMEN TYPE      PERIPHERAL BLOOD

VOLATILES

NONE DETECTED

Specimens were intact upon receipt. Chain of custody, specimen security and integrity has been maintained. Testing has been performed as requested.

Reviewed by: J. Smith Date: 3/16/10

FINAL REPORT - THIS COMPLETES REPORTING ON THIS CASE.

\*\* END OF REPORT \*\*

3/22/10  
J

MAR 18 2010