

Autopsy Report

Deceased: Jessica Black	Sex: F	Race: Caucasian	Date of Birth: 03/21/1960	Age: 30
Date and Hour of Autopsy: 05/04/1990; 0800 hours			Autopsy Completed: 05/04/1990; 1200 hours	
Pathologist: Henry S. Myers, M.D.		Persons Present at Examination: Detectives Bruce Jensen and Ray Smith		
Cause of Death Asphyxiation due to ligature strangulation				
Manner of Death Natural Accident Suicide Homicide Pending Investigation Could Not Be Determined				
Date of Death May 3, 1990	Time of Death Approximately 1330 hours	Body Length 5 feet 6 inches	Body Weight 195 lbs	
Documented Injuries				
<i>External Examination</i>		<i>Internal Examination</i>		
<ul style="list-style-type: none"> • Abraded ligature mark on the neck • Petechiae on eyelids, conjunctivae, and sclerae • Soft tissue edema of the cheeks and lips • Superficial scratches / abrasions on neck • Superficial abrasions to the right knee and shin • Greenish yellow contusion on upper left arm • Purple contusion on right wrist 		<ul style="list-style-type: none"> • Damage to the internal neck structures <ul style="list-style-type: none"> ○ Fracture of hyoid bone and larynx ○ Hemorrhaged neck muscles • Partially healed rib fracture on right side • Presence of embryonic disc in uterine cavity <ul style="list-style-type: none"> ○ Gestation estimated at 3 weeks 		
Related Case Information				
On May 3, 1990, the decedent was reportedly found lying in a supine position in the brush behind a large rock formation 50 feet from the main hiking trail on Blue Mountain. The decedent was observed to be wearing a green tank top, tan cargo shorts unbuttoned and partially unzipped, white tube socks, and brown hiking boots. Her underwear appeared undisturbed. A backpack and a glass water bottle were located on the ground near the body, and a driver's license was located inside one of the backpack pockets. The license belonged to 30-year-old Jessica Black. The photo on the ID card was consistent with the deceased and the identification was confirmed via dental records at autopsy.				
Additional Comments				
The deceased had several bruises in various stages of healing on her limbs and torso with a partially healed rib fracture which may indicate prolonged abuse. The decedent was found to be approximately 3 weeks pregnant.				
X <u>Henry S. Myers</u> Henry S. Myers, M.D. Chief Medical Examiner		<u>May 4, 1990</u> Date		
In accordance with policy, this report was reviewed by another board-certified forensic pathologist prior to release.				

Identification:

Positive identification is confirmed by comparison of antemortem and postmortem dental records.

External Examination:

When initially examined, the body is in a sealed/secure (seal#55788) and properly labeled body bag (Black, Jessica). The body is that of a normally developed, muscular and adequately nourished appearing, 5 feet 6 inch long, 195 pound female whose appearance is consistent with the reported age of 30 years. An identification tag attached to the remains is also properly labeled (Black, Jessica).

Postmortem Changes:

Unfixed lividity is present, and rigor mortis is established in all major muscle groups, relenting with modest pressure. The temperature is somewhat cool following refrigeration.

Clothing and Personal Effects:

The following clothing items are received with the body in the body bag and examined separate from the body at the start of the postmortem examination:

- Green New Balance tank top, size medium
- Tan Patagonia cargo shorts, size 28
- Pair of white tube socks
- Pair of brown Merrell hiking boots, size 8
- Gray Hanes sports bra, size small
- Black Hanes underpants, size medium

Evidence of Injury:

Head and Neck

- Circumferential, 11 cm maximum width, abraded ligature mark on the neck with pink-purple contusions
- Petechiae in the eyelids, conjunctivae, and sclerae;
- Soft tissue edema of the cheeks and lips;
- 0.9 cm maximum dimension red abrasions perpendicular to the ligature mark, likely self-inflicted (fingernails).

Shoulders and Extremities

- 4.0 cm maximum dimension aggregate of red abrasions, distal right shin;
- 2.1 cm maximum dimension purple contusion with 1.2 cm maximum dimension aggregate of linear red abrasions, right knee;
- 1.5 cm maximum dimension greenish yellow contusion, upper left arm.

Wrists and Hands

- Circumferential, discontinuous, 3.2 cm maximum width, pink-purple contusions encircling the right wrist;
- Suspected blood, dirt, and debris collected from underneath the fingernails on both hands.

Internal Examination:

Organ Weights

Heart – 350 grams	Right Lung – 700 grams	Right Kidney – 150 grams	Liver – 2200 grams
Brain – 1340 grams	Left Lung – 650 grams	Left Kidney – 160 grams	Spleen – 200 grams

Head: The soft tissues of the scalp are free of injury. The brain is intact, surrounded by clear cerebrospinal fluid, with 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 and the internal structures are free of injury or other abnormalities. There are no skull fractures.

Neck: Layer by layer dissection of the anterior strap muscles of the neck reveals hemorrhages in the neck musculature and damage to both the hyoid bone and larynx. Areas of contusion or hemorrhage within the musculature. The thyroid is symmetric and red brown with moderate edema. The tongue is free of bite marks, hemorrhage, or other injuries.

Body Cavities:

The sternum and vertebral bodies are visibly and palpably intact. Stripping of the parietal pleura reveals an occult rib fracture on the right side that is partially healed. No excess fluid is present in the pleural, pericardial, or peritoneal cavities. The organs occupy their usual anatomic positions.

Cardiovascular System: The heart is contained in an intact pericardial sac. The epicardial surface is smooth. The coronary arteries arise normally and follow the usual distribution. Cross sections of the vessels show widely patent lumina. The myocardium is dark red-brown, firm, and free of focal or regional fibrosis, erythema, pallor, or softening. The atrial appendages are normal and free of thrombi. The valves are normally formed and free of vegetations and degenerative changes. The left and right ventricles are 1.3 and 0.4 cm thick, respectively. The atrial and ventricular septa are intact. The foramen ovale is sealed. The endocardium is smooth and glistening. The aorta arches to the left and gives rise to three intact and patent arch branches. The descending aorta and its major vascular branches are patent with no significant atherosclerosis. The venae cavae and major tributaries are patent and return to the heart in the usual distribution and are unremarkable.

Respiratory System: The pleural surfaces are glistening, red-purple, and smooth. The pulmonary parenchyma is diffusely congested and edematous. There are no masses or abscesses. The pulmonary vascular tree is free of thromboemboli. The trachea and proximal bronchi are unobstructed and otherwise unremarkable.

Hepatobiliary System: The liver has a smooth, intact capsule with a sharp anterior border. The parenchyma is brown-red and congested with the usual lobular architecture. No masses, fibrosis, or other abnormalities are appreciated. The gallbladder contains a small amount of green, watery bile and no stones. The mucosal surface is green and velvety. The extrahepatic biliary tree is patent.

Spleen and Hematopoietic System: The spleen has a smooth, intact, deep purple capsule covering red-maroon, moderately soft parenchyma. Regional lymph nodes and exposed bone marrow are unremarkable.

Pancreas: The pancreas is normally positioned. Cut surfaces are tan-pink with the usual lobular architecture. No masses, fat necrosis, or fibrosis are present.

Gastrointestinal Tract: The esophagus has the normal gray-white smooth mucosal surface. The esophagus contains no varices or diverticula. The gastroesophageal junction is within normal limits. The stomach contains approximately 40mL of green-yellow liquid. No pill fragments are noted. The gastric mucosa is intact with normal rugal folds. The duodenum, small bowel, colon, and mesentery are externally free of serositis, strangulation, intussusception, herniation, or other anatomic abnormalities. The appendix is surgically absent.

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

Genitourinary System: The external surfaces of the kidneys are red-brown and finely granular. The cut surfaces reveal uniformly thick cortices and sharp corticomedullary junctions. The pelves are unremarkable and the ureters are uniform in course and caliber. The urinary bladder contains 100mL of clear urine. The bladder mucosa is gray-tan, and the wall is intact. The uterus, cervix, fallopian tubes, ovaries and vaginal vault are without injury. An embryonic disc is present in uterus indicating pregnancy at approximately three weeks gestation.

Musculoskeletal System: The skeletal muscles are firm and appropriate for body habitus. There are no significant joint deformities. The cervical spinal column is stable on internal palpation.

Special Procedures:

- Layer-by-layer dissection of the anterior neck tissues.
- Radiographic analysis revealed fractures of the hyoid and larynx.
- Incision and subcutaneous dissection of the anterior and lateral aspects of the right wrist revealed multifocal fascial hemorrhage, with approximately 1.5 mL liquid blood accumulation in the tissue. The exposed wrist musculature itself appears free of injury.

Additional Procedures:

- Documentary photographs are taken.
- Postmortem specimens collected and retained: vitreous fluid, femoral blood, urine, liver, and gastric contents.
- Representative tissue samples are retained in formalin for microscopic examination.
- Fingerprints and blood spot card were collected as references.

Microscopic Examination:

- Moderate hypoxic/ischemic damage to tissues.
- Absence of an inflammatory infiltrate.
- Micro hemorrhages in subcutaneous tissues of neck.
- Interstitial and intra-alveolar edema in lungs.
- No significant pathologic abnormality noted in heart, liver, spleen, kidney, pancreas, or adrenal slides.

Toxicology & Other Laboratory Tests:

- Femoral blood sample sent for postmortem toxicology – pending analysis.

Evidence Recovered:

- Left- and right-hand fingernail scrapings collected and placed in a labeled, sealed envelope.
- Fibers and ligature collected from the neck and placed in a labeled, sealed envelope.
- Two oral swabs, anal swabs, and vaginal swabs were collected and placed in a labeled, sealed envelope.