

FINAL REPORT

REPORT OF POSTMORTEM EXAMINATION

#76

VANCOUVER HOSPITAL
Forensic Pathology
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DATE OF AUTOPSY October 16, 2007

COMMENCED AT 09:00 Hours

CORONER Owen Court

CORONER'S NUMBER 07-270-1054 ✓

AUTOPSY # 07-2512

DECEASED'S NAME DZIEKANSKI, Robert

SEX Male

DATE OF DEATH October 14, 2007

AGE 40

PRINCIPAL PATHOLOGICAL FINDINGS:

1. No significant injuries.
2. Fatty liver, atrophy of the cerebellar vermis, dilated heart.
3. Negative toxicologic examination.
4. No atherosclerosis.

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MINISTRY OF SOLICITOR GENERAL
B.C. CORONERS SERVICE
VANCOUVER METRO REGION

PART 1. PRINCIPAL CAUSE OF DEATH:

- a. Sudden Death During Restraint

- b. _____
due to or as a consequence of
- c. _____
due to or as a consequence of

PART 2. CONTRIBUTORY FACTORS:

- a. Chronic Alcoholism

- b. _____

C. Lee

C. Lee, MD, FRCPC
Forensic Pathologist

POSTMORTEM EXAMINATION:

The autopsy was conducted in the mortuary of the Vancouver General Hospital on Tuesday, October 16, 2007 commencing at 09:00 hours.

Attending the autopsy were Sergeant Christiansen of the Richmond RCMP and Constable Hoivik of IHIT. Pons Paez was the Pathology Attendant.

IDENTIFICATION:

Identification was by the Coroner's Form B. There was a tag on the body bag bearing the deceased's name and the Coroner's File #07-270-1054.

EXTERNAL EXAMINATION:

State of the Body

Temperature:	Cold
Rigor Mortis:	Full
Postmortem Lividity:	Posterior surface of body, fixed
Decomposition:	Nil

External Features

Sex:	Male
Age:	Consistent with documented age of 40 years
Length:	177 cm
Weight:	86 kg
Build & Nutrition:	Average build. Well nourished
Hair:	Dark brown
Eye Colour:	Hazel
Pupils:	0.5 cm, equal
Conjunctivae:	Slightly congested, rare petechiae in the left lower eyelid
Nose:	Intact
Teeth:	Natural upper and lower dentition
External Genitalia:	Unremarkable male
Skin Features:	Extensive irregular scars are on the posterior left upper arm and the left side and back suggestive of burns. A 5.0 cm faint linear scar is on the anterior right thigh.

EVIDENCE OF THERAPY:

Oral airway, endotracheal tube, ECG pads, defibrillator pads, intravenous catheter in the left antecubital fossa, needle puncture marks on the right arm covered by bandages.

Injuries associated with resuscitative attempts include bilateral anterior 2nd to 6th rib fractures and a fractured sternum. Scattered small abrasions are on the central chest.

EVIDENCE OF INJURY:

Head and Neck

A 2.5 x 1.0 cm abrasion is above the left eyebrow. A 3.0 x 2.0 cm abrasion is on the right cheek. Internally, there are no skull or brain injuries, and a layerwise dissection of the neck reveals no injuries.

Thorax and Abdomen

A pair of punctate abrasions 2.0 cm apart is on the central chest. The lower abrasion is somewhat darkened around the edges. A 4.0 x 2.0 cm brown contusion is on the lower right chest. A punctate dried red abrasion is on the lower right abdomen. There are no internal injuries.

Extremities

A 3.0 x 2.0 cm red contusion is on the left upper arm. Multiple round and oval red contusions, approximately 1.5 to 2.0 cm in diameter, are on the posterior left forearm. A 3.0 cm transverse dried linear abrasion is on the lateral left wrist, and a 5.0 cm linear faint red contusion is on the medial left wrist. A 1.0 cm abrasion is on the back of the left hand near the base of the index finger. A 0.5 cm abrasion is on the lateral right forearm. A 6.0 cm linear red contusion is on the medial right wrist. Incising both wrists reveal scattered subcutaneous hemorrhages in both wrists.

Several linear scabbed abrasions are on the lateral left thigh. A 2.5 x 1.5 cm red contusion is on the left knee. A 1.0 cm dried red abrasion is just below the left knee. A 3.0 cm red contusion is on the medial left ankle. A 0.5 cm dried red abrasion is on the medial right shin.

INTERNAL EXAMINATION:

Head and Neck

Scalp:	Unremarkable
Skull:	Intact
Brain Weight:	1190 gm
Brain - External:	Cerebral hemispheres are symmetrical and mildly atrophic, but otherwise unremarkable. Brainstem and cerebellum are unremarkable. The cerebral arteries contain no atherosclerosis.
Brain - Sections:	Brain is cut fresh. Ventricles are symmetrical and of normal size. No localized lesions. The brainstem is unremarkable. The cerebellum shows atrophy of the cerebellar vermis.

Vertebral Column:	Intact
Larynx:	Intact with no mucosal lesions
Hyoid Bone:	Intact
Thyroid:	Unremarkable
Soft Tissues of Neck:	Unremarkable

Thorax

Rib Cage:	See Evidence of Therapy
Pleural Cavities:	No significant effusions or adhesions
Mediastinum:	No tumours or lymphadenopathy
Esophagus:	Unremarkable
Trachea & Bronchi:	Clear of foreign material
Pulmonary Vessels:	No thromboemboli
Lungs:	Right 1030 gm and left 990 gm; congested and edematous cut surface with no localized areas of consolidation.
Pericardium:	No significant effusions or adhesions
Heart Weight:	370 gm
Heart:	Right ventricle is 0.4 cm in thickness, left is 1.3 cm in thickness. Valves are unremarkable in structure and circumference and without surface vegetations or scarring. The ventricles are dilated, and the myocardium appears somewhat soft but shows no scars or acute infarction.
Coronary Arteries:	Right dominant circulation; all widely patent
Aorta & Major Arteries:	No atherosclerosis

Abdominal Cavity

Peritoneal Cavity:	No significant effusion or adhesions
Stomach & Duodenum:	No ulcers or other mucosal lesions; lumen contains minimal contents
Intestines:	Contain minimal contents, and contains no evidence of drug packets. No obstruction or perforation is noted.
Appendix:	Present
Liver:	1800 gm; soft, greasy yellow/tan cut surface with no localized lesions
Gallbladder:	No calculi
Bile Ducts:	Normal calibre
Spleen:	130 gm; unremarkable cut surface
Pancreas:	Unremarkable
Adrenals:	Unremarkable
Kidneys:	Right weighs 150 gm and left weighs 160 gm; smooth tan/brown cortical surfaces with no localized lesions
Urinary Bladder:	Contains no urine. Mucosa unremarkable

Musculoskeletal System/Extremities

No evidence of acute or chronic bone or joint deformity.

TOXICOLOGY:

Samples of blood and vitreous fluid are submitted to the Provincial Toxicology Centre for toxicological analysis.

The report of that analysis (PTC#07-1671) indicates no ethanol or other drugs detected. No glucose or ketones are detected in the vitreous fluid.

MICROSCOPIC DESCRIPTION:

- Kidney:** No significant histopathology.
- Liver:** Severe macrovesicular steatosis; mild to moderate chronic inflammation in the portal tracts, without associated hepatocyte necrosis.
- Heart:** Mildly increased, patchy interstitial and perivascular fibrosis; focal areas of acute interstitial hemorrhage; mild fatty infiltration in the right ventricle, without fibrosis or inflammation.
- Lung:** Vascular congestion, rare fat embolism. No thromboemboli identified.
- Brain:** The cerebellum shows moderate to severe atrophy, with loss of Purkinje cells and proliferation of Bergmann's glia. The remainder of the brain is unremarkable.

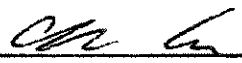
COMMENTARY:

The circumstances surrounding the death were provided to me by the Coroner's Form B as well as medical records provided by Citizenship and Immigration Canada, and a video of the events leading to death. The autopsy showed only minor, superficial injuries, including bruising around the wrists consistent with the application of handcuffs. There were no neck injuries. The sternum and ribs were fractured, but these are consistent with injuries occurring during resuscitation attempts. A darkened punctuate abrasion on the central chest is consistent with an electrode from a Taser. The other electrode mark is not apparent, but a couple of punctuate abrasions are present on the chest and abdomen, and one of these might be the other Taser mark. Rare petechial hemorrhages are noted in the left eyelid, but these could have occurred as a result of the resuscitation attempts. The autopsy also showed the presence of a severely fatty liver, atrophy of the cerebellar vermis, and a dilated cardiomyopathy. These findings are consistent with chronic alcoholism. The remainder of the autopsy was unremarkable. Postmortem toxicological examination was unremarkable. Sudden death following restraint has been described in the forensic literature, but the cause and mechanism is not well understood. It has been associated with virtually all forms of

physical restraint. It usually involves men who are combative and acting bizarrely. As a result, these cases often involve law enforcement personnel. However, cases have also involved medical personnel, and occasionally ordinary citizens. In many of these cases, the deceased was intoxicated with drugs such as cocaine or other stimulants. The current belief is that the drugs cause the agitated or excited delirium that result in the bizarre behaviour, and the subsequent death following restraint. Typically, the autopsy shows minimal findings.

This case differs from the cases typically described in the literature in that the toxicology examination shows no drugs present. Furthermore, no medical condition that may cause delirium was identified. This corresponds with the video which shows the decedent to be agitated, but he did not appear delirious. However, the absence of a definite anatomic cause of death is typical of the sudden deaths following restraint that is described in the literature. His dilated cardiomyopathy would have put him at an increased risk for development of an arrhythmia and sudden death, but probably would not have caused death by itself. The added stress of the physical restraint along with the decreased ability to breathe as a result of being pinned in the prone position may have been enough to elicit a fatal arrhythmia. The presence of signs of chronic alcohol abuse does raise a possibility that he was suffering from alcohol withdrawal, which may partly explain his agitation. It is likely a combination of these and other contributory factors that lead to his death. Therefore, the cause of death is best described as sudden death following restraint.

CL/pd



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