PM 91/2049 (JW)

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**NSW INSTITUTE OF** 

FORENSIC MEDICINE

body of:-

Medical report upon the examination

Name: William James DUTFIELD PM Number: 91/2049

CORONERS ACT, 1980

I Johan Duflou a registered medical practitioner, practising my profession at the New South Wales Institute of Forensic Medicine, in the State of New South Wales, do hereby certify as follows:

At 5.00 pm, on the 20th day of November, 1991 at Sydney in the said State, I made a post mortem examination of William James DUTFIELD.

The body was identified to me by Const. Morters of Mosman Police Station, as that of William James DUTFIELD aged about 41 years.

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**PRINCIPALS** I M N HILTON RFD DUFLOU THG OETTLE C H LAWRENCE

P G BRADHURST

CONSULTANTS P BALE **E P CREMATY** W A EVANS T J GAHA C I G GRIFFITHS C G HARPER W J HENSLEY AE R PAMPHLETT **G RUBEN** 

**ASSOCIATES** G D BELLAMY P BOTTERILL W H BRIGHTON **G HIGGINS** A MIDDLETON

The body was first examined at Spit Road, Mosman at approximately 2.25 pm on the 20th November 1991.

The deceased was slumped over a lounge chair and there were obvious injuries to the head. Blood was noted on the walls, ceiling and floor of the lounge room.

Rigor mortis was present in all major muscle groups and there was pronounced postmortem lividity of the lower limbs and left hand. There was a limited amount of lividity of the face.

The ambient temperature was 20.7°C and the rectal temperature was 27.9°C.

The postmortem interval was estimated to be approximately 18 hours  $\pm$  2 hours.

Prior to the rectal temperature being taken, superficial and deep rectal swabs were taken; these swabs were taken back to the Institute and handed to Mr. R. Weigner of the Forensic Biology Laboratory for analysis.

The body was then transported to the NSW Institute of Forensic Medicine, where an autopsy was performed at 5.00 pm that day.

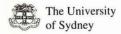
Upon such examination I found:

The deceased was dressed in the following items of clothing:-

- 1. Cream shoes.
- 2. Grey socks.

A JOINT USE FACILITY OF





- 3. Blue shorts.
- 4. Striped underpants.
- 5. A blue shirt.

The following identifying features were noted on the surface of the body:-

- 1. A tattoo of a mouse on the right shoulder.
- 2. A tattoo of a boxer on the right hip laterally.
- 3. A tattoo of a goldfish on the left hip laterally.
- 4. A tattoo of a moon and a star on the left shoulder.
- There was a 35 mm old scar on the medial surface of the left knee.

## Description of injuries:

# A. Head and neck:

- 1. There was a 13  $\times$  25 mm angle shaped laceration on the right forehead, 20 mm to the right of the midline, with the inferior margin of this laceration adjacent to the eyebrow.
- There was a 12 mm diagonally aligned laceration on the left forehead, 20 mm to the left of the midline.
- 3. There was an 8 mm diagonally aligned laceration in the left occipital region, 80 mm to the left of the midline.
- 4. There were two parallel lacerations, measuring 32 and 29 mm in length, transversely aligned in the occipital region, straddling the midline.
- 5. There was a 7 x 4 mm abrasion on the left side of the face, 30 mm anterior to the external auditory meatus of the left ear and associated with this abrasion was a horizontal linear scratch extending 28 mm in an anterior direction.
- 6. There was a 28 x 22 mm T-shaped laceration in the left frontal region of the scalp, 50 mm to the left of the midline.
- 7. There was a 23 mm sagittally aligned laceration in the left frontal region of the scalp, 20 mm to the left of the midline.
- 8. There was a 32 mm diagonally aligned laceration in the fronto-parietal region of the scalp, straddling the midline.
- 9. There was a 60 mm diagonally aligned laceration in the right parietal region of the scalp, extending from the midline towards the right and anteriorly.
- 10. Adjacent to the postero-medial end of wound 9, was a 33 mm diagonally aligned laceration in the parietal region of the scalp, straddling the midline.

- 11. There was a 24 mm diagonally aligned laceration in the right occipito-parietal region of the scalp, 35 mm to the right of the midline.
- 12. There was a 39 mm diagonally aligned laceration in the right occipito-parietal region of the scalp, extending laterally and anteriorly from the midline.
- 13. There was a 10 mm diagonally aligned laceration in the left occipito-temporal region of the scalp, 15 mm to the left of the midline.
- 14. There was a 35 mm transversely aligned laceration in the left occipito-parietal region of the scalp, 35 mm to the left of the midline.
- 15. There was a U-shaped laceration measuring  $23 \times 21 \times 22 \text{ mm}$  in size in the left temporal region of the scalp, 85 mm above the left external auditory meatus of the ear.
- 16. There was a 25 mm diagonally aligned laceration in the left temporal region, 65 mm to the left of the midline.
- 17. There was a large periorbital haematoma on the left.
- 18. There was a faint periorbital haematoma on the right.
- 19. There was blood in the nostrils.
- 20. There was blood in the mouth.
- B. Trunk:

No injuries were noted on the surface of the trunk.

# C. Arms:

- 1. There was a 90  $\times$  40 mm area of non-confluent blue contusion on the left upper arm posteriorly, midway between the elbow and the shoulder.
- 2. There was a 15  $\times$  10 mm abrasion on the posterior surface of the left elbow.
- 3. There was a 25  $\times$  12 mm area of petechial haemorrhage on the left forearm, 70 mm proximal to the wrist, on its ulna surface.
- 4. There was a 30 mm scratch on the dorsum of the left wrist.
- 5. There was a 3 mm diameter abrasion overlying the left ring finger metacarpal bone dorsally.
- 6. There was a 23 mm superficial laceration on the proximal phalanx of the left index finger dorsally.
- 7. There was an  $8 \times 3$  mm abrasion over the proximal knuckle of the left little finger.
- 8. There was a 9 mm laceration overlying the left index finger metacarpal bone dorsally.

# D. Legs:

- 1. There was a 10  $\times$  15 mm blue contusion on the medial surface of the right knee.
- 2. There was a 25  $\times$  20 mm blue contusion on the right shin medially, immediately distal to the knee.
- 3. A number of infected insect bites were noted on both legs.

#### <u>Internal examination of the body:</u>

# Head and neck:

Injuries to the scalp were as described previously.

There was minimal bruising of the scalp.

There was extensive fracturing of the skull, with diastasis of both the coronal and lambdoid sutures, fracturing of the right and left parietal bones, the left frontal bone and the occipital bone of the vault of the skull.

There was extensive comminuted fracturing within the left occipito-parietal region, suggesting an impact point in that region.

The base of the skull was also extensively fractured, with blow-down fractures of both superior orbital plates, fracturing of both middle cranial fossae and extensive comminuted fracturing of both posterior cranial fossae.

An incomplete ring fracture involving the occipital bone surrounded the posterior half of the foramen magnum.

In addition, there was fracturing of the left maxillary bone of the face.

The underlying dura mater was extensively lacerated, with associated laceration of the sinuses of the dura.

There was scanty subdural haemorrhage and diffuse subarachnoid haemorrhage over the surface of the brain.

The brain weighed 1220 g and demonstrated extensive laceration of the tissue.

The brain was placed in formalin for later detailed examination once fixed.

Injury to the eyes were as described previously.

The ears, nose and mouth were normal.

There was no fracturing of the nasal bones.

The mandible was similarly not fractured.

Bloodless field dissection of the neck revealed no abnormalities. Specifically there was no bruising of the neck musculature, nor was there fracturing of the cervical spine, hyoid bone or thyroid cartilage.

#### Cardio-vascular system:

The pericardium was normal.

The heart weighed 270 g.

The atria and valves of the heart were normal.

There was an area of flame-shaped subendocardial haemorrhage in the posterior wall of the left ventricle.

The free wall thickness of the right ventricle was 4 mm and that of the right ventricle was 14 mm.

The coronary arteries were macroscopically free of atheroma and there was no obvious fibrosis of the myocardium.

Within the cavity of the right side of the heart was a large amount of frothy blood, highly suggestive of air embolism. Frothy blood was also noted in both the superior vena cava and the inferior vena cava. There was no frothy blood in the hepatic portal system, nor was there evidence of advanced decomposition. The left side of the heart contained fluid blood only. Frothy blood was also noted in the pulmonary arteries. The aorta and its branches showed minimal atherosclerotic involvement only. Apart from air embolism, the venous system was normal.

#### Respiratory system:

The pharynx, larynx, trachea and bronchi were normal. The left lung weighed 380 g and the right lung weighed 490 g. Both lungs were well expanded and there was evidence of scanty aspiration of blood into the parenchyma of the right lung. The left lung was normal. The chest wall and diaphragm were normal. There were no rib fractures.

## Gastro-intestinal system:

The tongue, oesophagus, stomach and duodenum were normal. The stomach contained approximately 300 mls mixed food remains. The remainder of the bowel on external examination appeared normal and was not opened further. The rectum, anus and perineum showed no abnormalities.

#### Hepatobiliary system:

The liver weighed 1180 g and appeared somewhat pale. There were no mass lesions within the liver. The gallbladder and extrahepatic biliary tree were normal. The pancreas was similarly normal.

#### Haemopoietic system:

The spleen weighed 90 g and showed no abnormalities. There was no lymphadenopathy.

#### Genito-urinary system:

The left kidney weighed 140 g and the right kidney weighed 120 g. The capsules of both kidneys stripped with ease to reveal normal renal parenchyma. Both ureters were patent, ending in a normal urinary bladder

containing approximately 200 mls clear urine.
The prostate gland was normal.
There was scanty haemorrhage around the left testis.

The deceased was not circumcised.

#### Serology:

The deceased was found to be positive for hepatitis B surface antigen at autopsy.

No human immunodeficiency virus antibodies were detected.

Histology being performed: (Brain)

Blood sent for the estimation of alcohol and blood, liver, stomach and contents, urine and bile sent for chemical analysis.

Blood sent for grouping.

Head and pubic hairs sent for matching and fingernails.

Rectal swabs and smears sent for analysis.

Oro-pharyngeal swabs and smears for analysis.

#### Microscopic examination:

<u>Heart:</u> Sections of ventricular myocardium show no histologic abnormalities.

Lungs: There is some variation in alveolar space size and focal interstitial scarring.

Pulmonary arterioles in areas, predominantly in subpleural regions, show hypertensive changes.

Liver: There is a non-uniform increase in mixed inflammatory cells, predominantly limited to portal tracts.

The features are those of non-specific reactive hepatitis.

Fatty change is seen in areas.

Spleen: There are reactive germinal centres in the white pulp.

Kidneys: No abnormality detected.

Pancreas: Autolytic.

<u>Testes:</u> Sections of testes show no histologic abnormalities.

Thyroid: No abnormality detected.

Adrenal: There is pronounced congestion of the cortico-medullary junction vessels.

## Macroscopic examination of the brain:

The brain was re-examined after fixation.

The attached dura mater was normal.

The superior sagittal sinus was patent.

Subarachnoid haemorrhage covered the anterior half of the right cerebral hemisphere and the posterior 2/3 of the left cerebral hemisphere.

There was subarachnoid haemorrhage on the superior surface of the cerebellum.

Cortical contusions were noted on the lateral surfaces of both temporal lobes and the inferior surfaces of both occipital lobes. An area of probable perimortem laceration involved the entire infero-medial surface of the left temporal lobe.

The basal arterial vasculature and proximal cranial nerves appeared intact.

Mamillary bodies were of normal size.

The forebrain was cut at 10 mm intervals in the coronal plane.

Cortical contusions as described previously were confirmed. There was no haemorrhage in the area of temporal lobe laceration. A large area of non-confluent haemorrhage involved the deep grey matter on the right and white matter immediately inferior to it. This had resulted in localised swelling and deformation of the brain with compression of the left lateral ventricle.

There was extensive non-confluent haemorrhage into the white matter of the left occipital lobe.

Scanty haemorrhage was also seen in the parasagittal white matter bilaterally.

There is haemorrhage into the lateral ventricles.

The brainstem was sliced sagittally.

There was non-confluent haemorrhage in the pons predominantly involving the left side.

A small amount of haemorrhage was seen in the fourth ventricle.

The cerebellum was sliced at right angles to the folia. The subarachnoid haemorrhage was confirmed.

There was scanty haemorrhage into the cerebellar white matter.

# Microscopic examination:

Pons: Recent haemorrhage into the tissue is confirmed.

Cerebellum: Subarachnoid haemorrhage, as well as haemorrhage into the folia is seen.

Hippocampus: No abnormality detected.

<u>Temporal lobe:</u> Shows numerous cortical contusions and subarachnoid haemorrhage.

Parietal lobe: Shows scanty cortical contusions.

The forensic assistant in this case was R. Fabian.

# Pathology Summary:

- 1. BLUNT OBJECT HEAD INJURIES
- 2. AIR EMBOLISM
- 3. HEPATITIS B SURFACE ANTIGEN POSITIVE

In my opinion death had taken place about 18 hours previously and the cause of death was:

# 1. DIRECT CAUSE:

Disease or condition directly leading to death:

(a) HEAD INJURIES

#### ANTECEDENT CAUSES:

Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last:

(b)

(c)

Other significant conditions contributing to the death but not relating to the disease or condition causing it:

TO THE STATE CORONER,

SYDNEY

(Signature) ...

(Date) 1st April, 1992

ANALYSI RESERT