AUTOPSY REPORT

RECEIVED 16/1/10

for

Coroner Ian Smith

Regarding the body labelled as:-

"Jasmin RENATA"

(Pathologist reference number: [redacted]

(Mortuary reference numbe[redacted]

This report is confidential and should not be disclosed to another party without the Coroner's consent

INTRODUCTION

I, John David Rutherford, state that I am a duly qualified and registered medical practitioner and I practise as a regional forensic pathologist. My qualifications are BSc (Hons), MB ChB, FRCP (Edin), FRCPath, DMJ and FFFLM. I have been a forensic pathologist since 1992. Prior to this I have worked as a consultant surgical pathologist, a university lecturer in pathology, a registrar in internal medicine and a general practitioner. I have conducted over 6000 autopsies.

On the morning of Wednesday 23 September 2009 I attended the mortuary of Wellington Regional Hospital on direction from Coroner Peter Ryan in order to conduct an autopsy of the body of a young woman believed to be that of **Jasmine Nicole RENATA**. She was aged 19 years, resided at 28 California Drive, Totara Park, Upper Hutt, and had died at her home address between 2300 hrs on 21 September 2009 and 1730 hrs on 22 September 2009. The purpose of the autopsy was to determine the cause of death and to assist the coroner in his deliberations regarding the manner of death. A photographic record was made for medicolegal purposes.

MEDICAL HISTORY

Circumstances surrounding death

From examination of the POL47 police report to the coroner I learned that this young adult female had been found dead in bed in a curled up position lying on her left side with the covers pulled over her head. She had suffered a cold recently.

Past medical history

Other than the recent cold noted above there was no recorded past medical history.

Medication

She was not believed to be taking any regular medication.

Family history

No details of any family illnesses were recorded.

Social context

The decedent was a young female said to be of Maori descent; she was single (occupation not specified). Smoking and alcohol habits were not recorded. It is believed that she had tried cannabis but there was no suggestion that she was a regular abuser of other "recreational" drugs.

Clinical case notes

There were no Wellington Regional Hospital clinical case notes.

Further historical clinical information (received after the autopsy)

During a telephone conversation with Rhonda Renata, Jasmine's mother, I learnt that Jasmine was a "healthy girl who never had a sick day in her life" and was said by her mother to be perfectly well until she received Gardasil. She had three vaccinations. One would have been about a year prior to death and the other two followed over a six-month period. Her symptomatology started after the first injection; she developed warts on her hands. She had them frozen off on two occasions but they persisted throughout the vaccination period; it was not clear whether they persisted after the vaccination period to the date of her death.

Three weeks before she died she had "real bad chest pain". This settled on its own. On another occasion she suffered a racing heart in the kitchen. The heart rate was regular but fast. Rhonda could feel the racing heart through Jasmine's chest.

She had a cold about six weeks before she died. She saw her general practitioner who gave her antibiotics which cleared up the bulk of it but her runny nose persisted until the day of her death.

After the first shot of Gardasil she developed a weak arm; it affected the whole of the arm but Rhonda could not remember which one. It was apparently very difficult to use at work. After the last shot of Gardasil she developed tingling in her hands and sometimes in her feet.

Rhonda also mentioned that Jasmine had suffered back pain and leg pain although a detailed description of the exact symptoms was not possible and the timing of the symptoms was not clear.

Jasmine also developed memory lapses. Examples included not being clear as to which way round to hold a cheese grater and being slightly confused in the car in so much as, even though she had recently passed her junior licence, she had become confused about giving way to traffic.

Rhonda also informed me about the work of Dr. Chris Shaw, a research scientist in North America, who has a special interest in aluminium in neurones as a result of vaccinations and their adjuvants. I note that he advocates looking for neuronal damage in the brain and the use of the Morin stain to detect aluminium in the neurones.

EXTERNAL EXAMINATION

Identification

The body was identified from a police name band around the left ankle.

Body coverings

The body was dressed in a hospital shroud and wrapped in a white hospital sheet. No clothing was present; a single small silver stud was present on the left side of the nose.

General observations

The body was that of a young adult looking female whose general appearances were consistent with the statement that she was of Maori descent. She measured 162 cm crown to heel and weighed 58 kg. Head hair was long and brown. The skin was normal. The eyes were normal; tache noire was present bilaterally but there were no petechial haemorrhages. Teeth were natural and in good condition. Fingernails were long, unbitten and unbroken. The back was normal.

Post-mortem changes

Decomposition was not established. Rigor mortis was not present. Post-mortem hypostasis affected the left side of the body and the left side of the face.

Scars and tattoos

There were no scars or tattoos.

Medical intervention

Electrocardiogram electrodes were present in standard positions but there was no evidence of active medical intervention.

Recent injuries

No recent injuries were identified.

Older injuries

There were no older injuries of any significance.

INTERNAL EXAMINATION

General observations

Internal decomposition was not established.

Musculoskeletal system

There was no evidence of osteoporosis, deformities or fractures.

Central nervous system

The scalp, skull, meninges, brain (1126 g) and cerebral vessels were normal.

Cardiovascular system

The heart (266 g) showed no abnormality of pericardium, epicardium, myocardium, endocardium, valves, chambers or coronary arteries. In particular, there was no evidence of occult congenital heart disease or overt inflammatory process.

Respiratory system

The larynx, trachea and main bronchi were normal. The lungs (left 566 g, right 418 g) were moderately congested and moderately oedematous. The pleural sacs were normal. The chest wall was normal with no evidence of injury.

Alimentary system

The lips, frenula, gums, teeth (natural and in good condition), tongue, pharynx, oesophagus and stomach were normal; the latter contained approximately 150 mL of masticated food residue. The small and large intestines (including caecum, appendix and anus) were normal. The liver (1304 g), pancreas and peritoneal sac were normal. The gallbladder contained no stones but in the lumen there was residual thick yellow material, possibly inspissated bile, possibly purulent material; a

microbiological swab was taken; this later proved to be negative for pathogens.

Genitourinary system

The kidneys (left 126 g, right 122 g), ureters and bladder were normal; the latter contained 40 mL of clear urine. The uterus, fallopian tubes, broad ligaments and ovaries were normal. The cervical os was a little unusual in that it was patulous and elongated side to side rather than being round or oval as might be expected in a nulliparous girl. The external genitalia were normal.

Reticuloendothelial system

The spleen (124 g) and lymph nodes were normal.

Endocrine system

The pituitary, thyroid and adrenal glands were normal.

FURTHER INVESTIGATIONS

Toxicology

Submissions

Samples of iliac vein blood, urine, liver, gastric contents, lung, brain and hair were submitted to ESR laboratories for analysis.

Results

I am in receipt of a toxicology report dated 17 November 2009 authored by Helen Poulsen (forensic toxicologist). In summary no commonly used or abused drugs were detected.

Interpretation

I defer to the analytic and interpretive expertise of the toxicologist and refer the coroner to her report for detailed appraisal. With respect to my role in the investigation I am satisfied that, as far as can be ascertained, drugs were not material to this young woman's demise.

Histology

Small samples of each of the major organs were retained for histological examination. 19 blocks weighing 20 g in all were examined. In summary, sections of heart, lung, liver, kidney, brain

(hippocampus, cerebellum and watershed cortex), pituitary gland, ovary, endometrium and cervix were within normal histological limits. I could see no evidence of neuronal loss or inflammatory change within the nervous system.

Microbiology

A swab of bile was taken. Pus cells were not identified. No microorganisms were seen on microscopy. Culture revealed a scanty growth of enteric flora. This would be consistent with post mortem contamination.

Virology

Polymerase chain reaction studies for influenza A and influenza B were negative.

Cardiac channelopathy

A sample of tissue has been submitted to the cardiac inherited diseases group in Auckland so that the decedent's genetic structure and family can be investigated in case there is a molecular abnormality of the cardiac electrical conduction system that might result in sudden unexpected death. This process usually takes many months and requires the cooperation of family members. A copy of the report will be forwarded to the coroner in due course.

SUMMARY

1. This young adult female was found dead in bed lying on her left side with the bed covers over her head on the afternoon of 22 September 2009. She had last been seen alive the previous evening. Although she had suffered what was described as a "cold" recently she was said to have been well the previous evening with a normal appetite.

2. Examination of the scene by police was unremarkable.

3. External examination of the body at the mortuary was negative.

4. Internal examination revealed some minor changes involving the gallbladder and the uterine cervix (both of which, on further examination by microbiological studies and histology respectively, revealed no significant disease).

5. After full autopsy and further investigations, there was no major abnormality naked eye, microscopically, toxicologically or microbiologically that might be regarded as a potential cause of death.

6. A telephone conversation with Jasmine's mother some months after the autopsy revealed a more complicated medical history than was previously available (see "MEDICAL HISTORY" section above).

7. As a consequence of the above telephone conversation and from other sources, I am aware of the family's concerns regarding any possible role of the antiviral vaccine Gardasil.

8. I could find no evidence at autopsy of any inflammatory process that might represent an abnormal reaction to this agent. Thus, whilst it is never possible to absolutely exclude a hypothesised mechanism of this nature, I have no pathological evidence to support it. Further, I know of no means by which the matter could be further investigated and *meaningfully* interpreted from a pathological perspective.

9. The pathology laboratory is unable to offer a routine specific test for aluminium in neurones (I believe that this is very much a research tool rather than a diagnostic tool). Even if aluminium were to be found, I would not know how to interpret its presence. I was unable to see evidence of damage to, or a reactive process involving, neurones in Jasmines' brain.

10. Difficulties in establishing causality when allegations of associations between an agent and pathology are illustrated by the long controversy which raged until a few years ago about the possible relationship between aluminium and Alzheimer's disease. The situation has eventually settled to a position where most workers in the area agree that if aluminium is present in excess it is an epiphenomenon rather than a causal agent. If there is a relationship between aluminium adjuvant in vaccines and neurological conditions that may result in death, then it will be a long time, probably many years, before a link is proved or disproved.

11. In short, if the allegations regarding Gardasil were to be true, then it is likely that the evidence would have to come from a statistical analysis of population studies or from specialized research laboratories rather than from investigation of an individual case in a diagnostic forensic or anatomical pathology unit.

12. Whilst I am unable to answer all the questions raised in this case, I am (with the coroners consent) willing to cooperate with any appropriate investigating authority that feels that it might be able to assist. However, this would be premature before the results of the cardiac inherited diseases group work on Jasmine's case are available.

13. It is worth noting that no clear cause of death can be established in 2 to 5 per cent of autopsies despite extensive investigations.

OPINION AS TO MEDICAL CAUSE OF DEATH

1a. **Unascertained**

Signed: Dated: 13th July 2010

[redacted] BSc (hons), MB ChB, FRCP (Edin), FRCPath, DMJ, FFFLM

The opinions expressed above are based upon information available at the present time and are subject to review should further information come to light at a later date.