IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: 2010 / 1093

FINDING INTO DEATH WITH INQUEST

Form 37 Rule 60(1)
Section 67 of the ***Coroners Act 2008***

Inquest into the Death of: MICHELLE JOHNSON

Delivered On:	21 March 2014
Delivered At:	Coroners Court of Victoria Level 11, 222 Exhibition Street, Melbourne
Hearing Dates:	28 January 2014 – 31 January 2014
Findings of:	CORONER PHILLIP BYRNE
Representation:	Dr Paul Halley of Counsel for the Royal Women's Hospital Mr Simon Loftus of Counsel for Dr Sze Lee Mr Chris Winneke of Counsel for Ambulance Victoria
Police Coronial Support Unit	Leading Senior Constable Tracey Ramsey

I, PHILLIP BYRNE, Coroner, having investigated the death of MICHELLE JOHNSON

AND having held an inquest in relation to this death on 28 January 2014 – 31 January 2014
at MELBOURNE
find that the identity of the deceased was MICHELLE JOHNSON
born on 28 August 1978
and the death occurred on 22 March 2010
at the Royal Women's Hospital, Flemington Road, Parkville VIC 3052

from:

1 (a) RUPTURED SPLENIC ARTERY ANEURYSM

in the following circumstances:

1. Ms Michelle Johnson, 31 years of age at the time of her death, resided with her partner Mr Robert Stojcevski at 50 St Georges Road, Northcote. Ms Johnson was a journalist employed by The Age newspaper. Ms Johnson was pregnant, at almost 32 weeks gestation; it was her first pregnancy.
2. I propose to initially set out in broad brush terms the sequence of events in the period leading to Ms Johnson's untimely death and then return later in the finding to addressing various aspects of her management.
3. At approximately 11pm on Saturday, 20 March 2010, Ms Johnson was at a party. She was dancing when she experienced a sudden onset of quite severe left sided abdominal pain followed by dizziness and faintness.
4. An ambulance was called and Ms Johnson was conveyed to the Royal Women's Hospital (RWH). Ambulance Paramedics recorded that Ms Johnson's blood pressure was very low at 60 systolic, but improved to 100 systolic once she was laid supine. Ms Johnson's pulse rate was apparently normal.
5. Ms Johnson arrived at the Emergency Department at the RWH at 12.10am on Sunday 21 March 2010. Ms Johnson was triaged category 3, and at about 1.40am was examined by Dr Natasha Frawley, a Registrar in Obstetrics and Gynaecology. Dr Frawley took a history and undertook a thorough examination of Ms Johnson. Dr Frawley was aware that Ms Johnson was a private patient of Dr Samantha Hargreaves, specialist Gynaecologist and

Obstetrician who was being covered over the weekend by Dr Sze Wey Lee, specialist Gynaecologist and Obstetrician.

6. An abdominal ultrasound scan was performed together with a cardiotocograph, the latter assessed as normal. A variety of investigations were undertaken including full blood examinations and a Kleihauer which did not establish the precise cause of the pain Ms Johnson experienced.

7. At 1.42am Dr Frawley phoned Dr Lee to convey her findings on history and examination. Dr Frawley conveyed to Dr Lee what she describes as the "concerning features"; the initial low blood pressure and the sudden onset of pain. Having received this information from Dr Frawley, Dr Lee indicated she considered the most likely diagnosis was severe musculoskeletal pain brought on by the movement of dancing. Dr Frawley says it was agreed that Ms Johnson be admitted as a public patient with a view to Dr Lee reviewing Ms Johnson the following morning. The "working diagnosis" of musculoskeletal pain, and the treatment plan agreed between Dr Frawley and Dr Lee, was conveyed to Ms Johnson, her mother Mrs Marge Johnson, and Mr Stojcevski, who were at the hospital. Dr Lee had requested that pethidine 150mg, rather than panadeine forte, be administered for analgesia.

8. Next morning at about 7.30am, Dr Frawley discussed the results of the blood tests with the resident, Dr Rylance and asked Dr Rylance to review Ms Johnson before any decision was taken to admit Ms Johnson to a ward as a public patient. Dr Frawley maintains she advised Dr Rylance that although Dr Lee was a private doctor (covering for Dr Hargreaves) Ms Johnson was to be admitted as a public patient with a plan that she would be reviewed by Dr Lee that morning.

9. It would appear that the observations of Ms Johnson during the day of 21 March were normal and a progress note at 10.15am indicated that Ms Johnson's pain had subsided to 4/10. No review by Dr Lee occurred and I will return to that issue later.

10. Dr Lee apparently called the RWH at approximately 11.30am on 21 March 2010, enquiring whether there was a private patient of Dr Hargraves at the hospital. She was told there was not and concluded the patient had not been admitted but discharged home. However Ms Johnson, her mother, and other family members stayed with Ms Johnson during the day, awaiting the review by the private obstetrician. As it turns out, Dr Lee was at the hospital that morning but did not realise that Ms Johnson was in the ward awaiting review. Ms Johnson remained in the hospital throughout the day.

11. Shortly after 6pm after hospital staff were approached by Mrs Marge Johnson, Dr Lee received a page to which she responded and was advised Ms Johnson was still in the

hospital awaiting review. Dr Lee says she was advised that Ms Johnson's vital signs were normal, her pain had "largely subsided" there was no evidence of vaginal bleeding and good foetal movements had been noted during the day. Dr Lee says Ms Johnson was keen to go home and asked if she would be able to see her soon. Dr Lee informed the staff that she was "tied up" with another patient, but could be at the RWH in 60-90 minutes. Dr Lee discussed the situation with Mrs Marge Johnson and, when finished with the other patient, called the ward to see if Ms Johnson was still there and wanting a review. An Obstetric Registrar had reviewed Ms Johnson in the meantime.

12. When Dr Lee rang back to see if Ms Johnson was still on the ward, she was told the family were just leaving and did not want to wait any longer as Ms Johnson felt better, wanted to go home and would arrange for a review by Dr Hargreaves during the week.

13. The final review of Ms Johnson was undertaken by Obstetrics & Gynaecological Registrar, Dr Madeline Cooke who took a thorough history and undertook an examination of Ms Johnson. She referred her conclusions to a Senior Registrar, Dr Dinesh Epitawala, who approved the discharge of Ms Johnson. Dr Cooke was advised by Dr Epitawala that Dr Lee, the private Obstetrician, had "given instructions to discharge the patient". Ms Johnson was discharged and went home.

14. At approximately 6.50am the following morning Monday 22 March 2010, Ms Johnson collapsed and had a seizure. Responding to a 000 emergency call, an ALS ambulance attended the St Georges Road address at 7.02am followed at 7.06am by a MICA ambulance manned by MICA paramedic Mr Travis Quirk, who having made a quick assessment called for a second MICA unit which arrived at approximately 7.15am. Ms Johnson was obviously very ill and she was conveyed, "lights and sirens", to the emergency department of The Royal Women's Hospital.

15. One of the MICA paramedics asked the Ambulance Victoria Clinician Mr David Llewellyn to advise the RWH they were en route. Mr Llewellyn advised the RWH by telephone that an ambulance with a patient with a Glasgow Coma score of three was on the way, and would take "15 minutes at least" to arrive. A short transcript of the call from the Clinician to Ms Cathy White, Associate Unit Manager was provided and constitutes exhibit "Q". This call was made at 7.22am, the ambulance arrived outside the Emergency Department at 7.27am at which time Ms Johnson was in cardiopulmonary arrest. The ambulance arrived at the Emergency Department some five minutes after Ms White was advised it would not be there for 15 minutes.

16. I will address the perceived non-preparedness of personnel at the RWH later in the finding.

17. Within minutes of arrival in the Emergency Department, a decision was taken to perform a peri mortem caesarean section. The procedure was carried out in the resuscitation room adjoining the Emergency Department while Ms Johnson was still on the ambulance stretcher. Baby Charlie was born at 7.42am.

18. In spite of the application of full aggressive resuscitation measures commenced shortly after arrival, Ms Johnson could not be revived and was pronounced deceased at 7.50am.

19. Although it is not technically part of this coronial investigation, I add that the tragedy visited upon the family by the death of Ms Johnson was compounded by the fact that baby Charlie did not survive and died two days after the delivery.

20. The death of Ms Johnson was reported to the coroner who directed an autopsy be performed. An autopsy and auxiliary tests were undertaken at Victorian Institute of Forensic Medicine by Senior Forensic Pathologist Dr Matthew Lynch who advised the death of Ms Johnson was due to:

    1 (a) Ruptured Splenic Artery Aneurysm

    Dr Lynch by way of explanation said:

    > *The cause of death in Michelle Johnson Stojcevski is rupture of a splenic artery aneurysm with subsequent extensive retroperitoneal and intraperitoneal haemorrhage.*

    And by way of comment added:

    > *Splenic artery aneurysm is a rare condition with a well recognised association with pregnancy. Rupture of these aneurysms is associated with significant maternal and foetal mortality. <u>The diagnosis is often not suspected clinically and in fact is often only made at post mortem examination following meticulous dissection.</u>*
    >
    > (my emphasis)

21. On 6 April 2010, Mrs Marge Johnson, the mother of Ms Johnson wrote a poignant letter to the coroner in which she raised a number of "concerns, comments and questions." I include in this finding an excerpt from that letter.

    - Was the weekend medical incident related to her death?
    - If she had been taken to St Vincent's would the outcome have been different?
    - Why did the confrontation between ambulance and Royal Women's staff take place in front of my daughter?

- Why wasn't my daughter taken to St Vincent's Hospital as they requested and were instructed to do so by her obstetrician?
- Why was there miscommunication between hospital staff and Michelle's obstetrician?
- Why did hospital staff tell me that they were waiting for the obstetrician and the obstetrician tell me she was told she was not there?
- Why didn't the obstetrician just come in and see Michelle first thing Sunday morning instead of, I have now been told, in fact she rang the hospital staff and was told over the phone that Michelle was discharged. Wouldn't she have wanted to check Michelle out or investigate further herself?
- If her obstetrician had visited her would the outcome been different?
- Would a caesarean delivery on Saturday evening given my grandson a chance of life?
- Did the pain relief received contribute in any way?
- Did this pain relief mask opportunity for further investigations?
- Could the reason for her death been detected prior by her obstetrician?
- Was there any negligence?

It became obvious that the family had raised serious concerns about the medical management of Ms Johnson.

22. It should be noted I only took over carriage of this matter in May 2013. I was keen to advance the matter having regard to its age. To that end I listed the matter for a Mention/Directions Hearing on 13 November 2013 with a view to seeking to identify and isolate the issues, determine whether a formal inquest was warranted, if so set the scope and parameters of the inquest and settle (as best one can at that stage) a list of witnesses.

23. At the Mention/Directions Hearing the following parties were involved:

- Ms Tracey Ramsey – PCSU assisting the coroner
- Ms Kathryn Booth – Maurice Blackburn, solicitor for the family
- Ms Mia Campbell – representing Dr Sze Lee
- Mr Colin Grant – Ambulance Victoria

At the hearing I indicated what I believe my role to be and invited Ms Booth to articulate what issues the family wanted pursued at formal inquest. Once Ms Booth advised the issues that concerned the family, including taking issue with the opinions expressed by Dr

Bernadette White, the independent expert the court commissioned to provide a report, it was clear the matter would have to proceed to formal public inquest.

24. Ms Booth indicated the family had issues/concerns about the medical management of Ms Johnson by both the RWH, Dr Lee and had concerns about two aspects of the treatment of Ms Johnson by Ambulance Victoria. In broad terms their issues related to misdiagnosis, missed opportunity and miscommunication. It was conceded that although ruptured splenic artery aneurysm is a rare complication in pregnancy it is well enough known that at least a differential diagnosis of non-obstetric abdominal pain should have been explored. I indicated that all of the issues of concern articulated by solicitors for the family would be explored at inquest.

25. The matter proceeded to inquest over four days – 28 January 2014 until 31 January 2014. At the hearing the family was not legally represented. Dr Paul Halley of counsel represented the RWH; Mr Simon Loftus of counsel represented Dr Sze Lee; and Mr Chris Winneke of counsel represented Ambulance Victoria. Ms Tracey Ramsey of the PCSU appeared to assist. Mrs Marge Johnson represented the family and joined the others at the bar table. Mrs Johnson was supported in court by a number of family members and friends. I indicated to Mrs Johnson that Ms Ramsey would assist her where she was able, within the constraints of her role as assisting the coroner. Mrs Johnson played an active role in the proceedings.

26. The benefits of formal inquest were amply demonstrated as the matter proceeded; *viva voce* evidence was received, issues explored, explanations provided, decisions explained, and facts elucidated. To demonstrate what I mean, by the end of the proceedings Mrs Johnson indicated that, other than one peripheral matter, she NO longer had issues with the performance of the Ambulance Victoria paramedics and, graciously it must be said, thanked those paramedics who gave evidence for their endeavours in trying to save the life of her daughter.

27. Having said that Mrs Johnson remained critical that the prospect of a rupturing splenic artery aneurysm was not diagnosed and maintained that the investigations undertaken at the RWH on 21 March 2010 were inadequate. Mrs Johnson remained highly critical of the performance of the covering private specialist obstetrician Dr Sze Lee.

28. I had previously indicated that it was <u>not my role to lay or apportion blame but to endeavour to establish the facts surrounding the death and to then consider whether the facts, as found, constitute causal factors in the death</u>. It is for others to draw legal

conclusions. As Mrs Johnson had raised the spectre of "negligence", I refer to an excerpt from the judgment of Callaway JA in *Keown v Kahn*.[1] His Honour said:

> *"In determining whether an act or omission is a cause or merely one of the background circumstances, that is to say a non-causal condition, it will sometimes be necessary to consider whether the act departed from a norm or standard or the omission was in breach of a recognised duty, but that is the only sense in which para. (e) mandates an inquiry into culpability. Adopting the principal recommendation of the Norris Report, Parliament expressly prohibited any statement that a person is or may be guilty of an offence. The reasons for that prohibition apply, with even greater force, to a finding of moral responsibility or some other form of blame: the proceeding is inquisitorial."*

Para (e) referred to by Justice Callaway was the provision in the 1985 Coroners Act where a coroner was required to identify any person who "contributed" to the death. It became thought that if one was found to have "contributed" to a death they were in some way culpable or blameworthy. Such was the connotation that "contribution" equated to fault, blame, and culpability that, following Justice Callaway's decision, the provision was repealed to make it clear it was NOT the role of the coroner to lay or apportion blame/fault.

29. Over the four (4) day hearing I heard evidence from the following witnesses

- Mrs Marge Johnson
- Dr Matthew Lynch – Senior Forensic Pathologist
- Dr Christine Bessell – Executive Medical Advisor, RWH
- Dr Bernadette White – Consultant Obstetrician (expert opinion)
- Dr Natasha Frawley – Obstetric Registrar, RWH
- Dr Sze Lee – private Obstetrician and Gynaecologist (covering Dr Hargreaves)
- Dr Madeline Cooke – Obstetric Registrar, RWH
- Mr Travis Quirk – MICA ambulance paramedic
- Mr Anthony Armour – MICA ambulance paramedic
- Ms Catherine White – Division 1 nurse, Associate Unit manager, RWH
- Dr Victor Hurley – consultant Obstetrician and Gynaecologist (expert re: ultrasound, called by RWH)

[1] *Keown v Kahn* (1999)1 VR 69

- Dr Nicola Yuen – Director of Women's Emergency Care Centre at RWH

30. That body of evidence was recorded, has been transcribed, and forms part of the evidence upon which I make my findings. It is not my practice or intention to regurgitate great slabs of evidence, but to seek to succinctly review the evidence which supports, or does not support, various issues/contentions. As Justice Batt stated in *Keown v Kahn*, prolixity is "unnecessary", is not envisaged by legislation and is, in my view, likely to be counter-productive.

31. As indicated earlier, the family no longer have issues with Ambulance Victoria, nor do I; I conclude their management of Ms Johnson was, for that time, entirely appropriate. I will address the issues of enhanced communications developed since the time of Ms Johnson's death later in the finding when I consider recommendations.

32. I turn to the crux of the matter, the principal concern of the family - the adequacy/efficacy of the assessment and treatment undertaken at the RWH upon the first attendance of Ms Johnson in the early hours of 21 March 2010, until her discharge at approximately 8.30pm that evening. The family contend the prospect of a non-obstetric cause for Ms Johnson's severe pain should have been further explored and a differential diagnosis of a rupturing splenic artery aneurysm made and treated. Mrs Marge Johnson contends that a consultant vascular surgeon and/or a consultant physician (from the Royal Melbourne Hospital) should have been called on to assess Ms Johnson's condition and explore possible non-obstetric causes for her pain.

33. It was in relation to this issue that the court commissioned the independent expert opinion from Dr Bernadette White. Dr White provided a comprehensive report (see exhibit "E"). Dr White was asked to provide a list of possible causes that should be considered in a patient who presented with the onset of acute constant abdominal pain at 32 weeks gestation. I reproduce the list Dr White provided under the head of pregnancy causes and non-pregnancy causes:

<u>Pregnancy Causes</u>

- Premature labour
- Placental abruption
- Degeneration of a fibroid
- Ovarian cyst complication
- Uterine rupture
- Sever pre-eclampsia or HELLP syndrome

- Ligament pain

Non-pregnancy causes

- Appendicitis
- Gall stones
- Pyelonephritis
- Renal calculus
- Pancreatitis
- Spontaneous rupture of the liver
- Ruptured splenic artery aneurysm
- Aortic dissection

Dr White added:

> *"It is not uncommon for women who present with abdominal pain for the initial diagnosis to be unclear. In this situation the usual management is to arrange investigations and allow a period of observation. The results of all the initial investigations that Ms Johnson had were unremarkable and were not helpful in establishing the diagnosis. Ultrasound assessment would have been useful if Ms Johnson's pain had persisted."*

Dr White considered the efficacy of Dr Frawley's, and her colleagues', assessment and treatment of Ms Johnson on the first presentation on 21 March 2010. Her conclusion is contained in paragraph 11 of her report; I include it in full here rather than seek to encapsulate her opinion:

> *"Abdominal pain is a very common cause for a woman to present to an emergency department during pregnancy. In the vast majority of causes, the cause is not immediately life threatening for mother or baby, and in many cases no immediate intervention is necessary. In many cases a period of observation is necessary to establish the diagnosis. In a significant number of women no definite diagnosis as to the cause of pain is made, and it is assumed to be due to normal pregnancy changes, such as 'ligament pain.' The condition that caused Ms Johnson's death is extremely rare and many experienced obstetricians will never see a case of a ruptured splenic artery aneurysm. Although in retrospect it seems likely that her pain on the 21st*

March was a premonitory warning, I believe she was assessed and managed appropriately at that time."

34. It seems to me that the critical factor in concluding whether a differential diagnosis of ruptured splenic artery aneurysm should have been made is its' rarity. There was other evidence on this issue from Dr Matthew Lynch and Dr Victor Hurley to which I will refer shortly, but in relation to that very issue I note Dr White opined that even experienced obstetricians would never see a case of ruptured splenic artery aneurysm in their entire careers. In fact, Dr Victor Hurley, a consultant obstetrician, in his evidence went as far as to say he had never encountered such a condition, and until undertaking some research to provide an opinion in this case, was not aware of the prospect of a ruptured splenic artery aneurysm. He maintained such a diagnosis, differential or otherwise, "would not have crossed my mind."

35. Dr White addressed the issue of whether an ultrasound or other radiological examination (other than one relating to the unborn baby) should have been performed to endeavour to establish the cause of the pain experienced by Ms Johnson. She stated that, had the symptoms been persistent or the pain prolonged and more severe, it would have been appropriate to arrange an ultrasound scan.

36. On that very issue, the RWH called Dr Hurley whose speciality is ultrasound. Two questions were posed to Dr Hurley: he was asked whether, if a woman presented with abdominal pain, in order to look for both obstetric and non-obstetric causes would it be "standard practice" to look for a splenic artery aneurysm. He answered stating that very few physicians would have encountered such a case due to its rarity. The "index of suspicion would be very low" and he would not have done an upper abdominal ultrasound.

37. Perhaps more importantly, Dr Hurley opined that in the circumstances prevailing in this case, with a patient whose BMI was 46.1, and a ruptured aneurysm established at autopsy to be 1.5cm, he did not believe there was "any prospect of seeing the splenic artery aneurysm."

38. In his autopsy report, Dr Matthew Lynch commented:

> *"Splenic artery aneurysm is a rare condition with a <u>well recognised association with pregnancy</u>. Rupture of these aneurysms is associated with significant maternal and foetal mortality. The diagnosis is often not suspected clinically and in fact is often only made at post-mortem examination following meticulous dissection"*

I suspect Mrs Marge Johnson seized on that part of Dr Lynch's comment that I have emphasised, to maintain her claim that the condition is not as rare as others have suggested. Dr Lynch's comment should not be viewed in isolation; it was a matter elaborated upon in his oral evidence. By "well recognised" Dr Lynch stated he had seen it twice during his 20 plus years experience as a forensic pathologist; the second case being this case. It should also be borne in mind Dr Lynch attends specifically to autopsies in cases of maternal deaths and is a member of the Maternal Mortality and Morbidity Committee of the Consultative Council on Obstetric and Paediatric Mortality and Morbidity. Ruptured splenic artery aneurysm is very obviously not "well recognised" in the obstetric community at this time, but as a result of the untimely death of Michelle Johnson will be better recognised in future – which I will expand upon.

39. Dr Lynch addressed the issue of whether the acute onset of severe pain on the night on 20 March 2010, which resulted in the first presentation to the RWH early on 21 March 2010 was associated with the splenic artery aneurysm which subsequently ruptured resulting in sudden death. He stated that the aneurysm most likely leaked (my expression) on the night of 20 March, but was "temporarily contained" by natural process so that the symptoms stabilised, then subsequently early next morning acutely and abruptly ruptured; in effect a two stage process with an extremely high mortality rate. Dr Lynch suggested the symptoms are non-specific, it is a rare condition that is accidentally disclosed during the investigations.

40. Dr Bernadette White also opined that the symptoms experienced by Ms Johnson on the night of 20 March 2010 "may have been due to initial retroperitoneal bleeding from her splenic artery aneurysm". I am satisfied it was. I accept the opinions of Drs Bernadette White and Matthew Lynch, that the sudden onset of severe pain experienced by Ms Johnson at the function on the Saturday night was (to borrow Dr White's terminology) a "premonitory warning" or as Dr Lynch described it "an initial retroperitoneal bleeding from her splenic artery aneurysm" which was "temporarily contained" or stabilised prior to the acute abrupt rupture some 20 or 30 hours later. Dr Lynch described the situation as a two-stage process. I accept his evidence as to that course of events.

41. I am unable to definitively say whether imaging may have led to a differential diagnosis of a rupturing splenic artery aneurysm but, having regard to Dr Hurley's opinion, I seriously doubt it would.

42. In a case such as this, where there is controversy over the core issue of whether the medical management was timely and appropriate, or whether there was some omission in breach of

a recognised duty or departure from a norm or standard,[2] and whether that departure was a causal factor in the death, it is incumbent on me to indicate the standard of proof I apply to that critical finding. On a number of occasions, the Victorian Supreme Court has confirmed that the appropriate standard of proof to be brought to bear in considering whether an individual or entity acting in their professional capacity has not performed to the appropriate standard is the *Briginshaw* test of "reasonable satisfaction".[3] The relevant standard of proof is therefore quite high; such a finding should not be made on inexact proofs or indirect inferences, but on cogent and persuasive evidence; a comfortable degree of satisfaction must be reached to make such a finding.

43. I am not satisfied that Dr Frawley's management of her patient was deficient in any way. I consider her assessment and treatment of Ms Johnson was, in spite of the final tragic outcome, reasonable and within established standards and practices. I note that at the completion of her evidence, Mrs Marge Johnson extended to Dr Frawley her appreciation for the care and treatment she provided to her daughter; I am confident the sentiment was genuine and heartfelt. Furthermore, I conclude the same can be said for the subsequent review undertaken by Dr Madeline Cooke, prior to Ms Johnson's discharge from the RWH on the evening of 21 March 2010.

44. In her final analysis, I accept the basic premise of Dr White's opinion that the RWH doctors assessed and managed Ms Johnson appropriately. I conclude the failure to diagnose a rupturing splenic artery aneurysm does not represent a deficiency in medical management.

45. Another issue of concern to the family was the very obvious breakdown in communication between the hospital and the covering private obstetrician, Dr Sze Lee, on 21 March 2010. After her initial examination and assessment of Ms Johnson at 1.42am, Dr Frawley conferred by phone with Dr Lee, explaining her findings. Having been advised of the outcome of Dr Frawley's examination, Dr Lee advised Dr Frawley she considered the most likely diagnosis was severe musculoskeletal pain. There was some discussion concerning whether Ms Johnson would be admitted as a public or private patient. Dr Lee did not have a "bed card" at the RWH although Dr Hargreaves, who Dr Lee was covering for that weekend, did have private admission rights. Dr Frawley states she advised Dr Lee she

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[2] *Keown v Kahn* (1999)1 VR 69

[3] *Anderson v Blashki* (1993) 2 VR 89, *Health and Community Services v Gurvich* (1995) 2 VR 69, *Chief Commissioner of Police v Hallenstein* (1996) 2 VR 1

proposed to admit Ms Johnson for observation as the diagnosis was somewhat unclear and to facilitate blood tests, including a Kleihauer (to exclude abruption). Dr Frawley claimed Dr Lee suggested Ms Johnson be admitted as a public patient, but she (Dr Lee) would review Ms Johnson on the ward the following morning. Dr Frawley mentioned in evidence that she had not concluded the pain experienced by Ms Johnson was musculoskeletal, she states that at that time her differential diagnosis was likely abruption. It is conceded there was no discussion about the prospect of ruptured splenic artery aneurysm. Dr Frawley says she accepted Dr Lee's diagnosis of musculoskeletal pain. Prior to handover at the end of her shift at 8.30am, Dr Frawley asked her colleague Dr Rylance to assess Ms Johnson and see if it was appropriate for her to be transferred to the ward. Dr Frawley advised Dr Rylance that Dr Lee had suggested Ms Johnson be admitted as a public patient and she (Dr Lee) would review Ms Johnson later that morning. This plan is in the progress notes.

46. There was discussion between Dr Frawley and Dr Lee about the options of admission as either a private patient under Dr Hargraves "bed card", or admission as a public patient. It should be understood that the Emergency Department at the RWH is solely a public unit. There is conflict in the evidence of Drs Frawley and Lee as to what arrangement was settled upon and who made the decision. I accept Dr Frawley's evidence that Dr Lee suggested Ms Johnson be admitted as a public patient; that version is supported by a contemporaneous entry in the progress notes. There may have been some confusion between Drs Frawley and Lee as to this issue. Whatever the situation, Dr Lee said she intended to "catch up with Michelle on my ward rounds in the morning if she stayed." Dr Lee did indeed ring the RWH at approximately 11.30am that morning and enquired whether a private patient of Dr Hargreaves was in the hospital. She was told there was no patient in the hospital under Dr Hargreaves. Dr Lee did not enquire if a Michelle Johnson was there; she says she had forgotten the name of Dr Hargreaves' patient who had been the subject of her discussion with Dr Frawley. I find that concession puzzling. Ms Johnson was, in fact, on the ward undergoing further tests and assessments, awaiting the anticipated review by Dr Lee. Dr Lee says she presumed the patient had not required admission and had gone home.

47. Ms Johnson, together with her mother, waited until approximately 6pm when they queried when Dr Lee would be expected. Hospital staff paged Dr Lee who, hearing that Ms Johnson was in fact still in hospital, said she could attend in 60 – 90 minutes after finishing with another patient she was currently seeing. Dr Lee requested a CTG to check foetal wellbeing. As stated earlier, by 8.30pm Ms Johnson was apparently feeling better, had

become somewhat frustrated and decided to leave the hospital after a review by a hospital doctor, Dr Madeline Cooke. Dr Cooke stated the family felt frustrated and abandoned by the non-attendance of their private obstetrician.

48. When Dr Lee rang back, having finished with the patient she was seeing when paged, she was told Ms Johnson had been reviewed and was about to leave the hospital. Dr Lee advised she could be at the RWH in 10 minutes and enquired if Ms Johnson wanted to wait to see her. The message was passed to Dr Lee that Ms Johnson felt fine and preferred to go home and ring Dr Hargreaves' rooms the next day to arrange a review.

49. The breakdown in communications was regrettable, but I have to consider whether what followed from the communication breakdown had any impact on the final outcome. Dr Lee said that after the 1.42am phone call she did not expect Dr Frawley to ring back unless Ms Johnson's condition deteriorated. She further conceded she "did not consider" the prospect of a ruptured splenic artery aneurysm, but may well have done so if a number of symptoms had occurred:

- If pain had persisted or increased
- If Ms Johnson became tachycardic
- Had Ms Johnson's blood pressure dropped
- Had the haemoglobin been low.

Dr Lee accepted she concluded the pain experienced by Ms Johnson at the function and thereafter was due to musculoskeletal pain.

50. Returning to the issue of whether the course of events would have been different save for the breakdown in communication between the RWH and Dr Lee. Mr Loftus, counsel for Dr Lee, in his examination of his client, asked whether knowing the detail of the assessment and investigations carried out at the RWH by the public doctors she would have provided any different treatment. Dr Lee said that even if Ms Johnson had been admitted to St Vincent's Hospital and she had reviewed her upon admission she would not have done anything differently. Specifically she stated she would not have ordered an ultrasound as there was, in her view, no indication one was needed.

51. I propose to deal shortly with an issue initially raised by the family – the decision taken by ambulance paramedics to convey Ms Johnson to the RWH rather than St Vincent's Hospital at the first presentation. In my opinion that decision was a judgement call clearly within guidelines and entirely appropriate. In my considered view, the performance of

ambulance paramedics involved in the care, treatment and management of Ms Johnson could not reasonably be criticised.

52. Turning immediately to the transportation of Ms Johnson to the RWH on the Monday morning, 22 March, the decision to convey Ms Johnson to the RWH was in my judgement again entirely appropriate; the emergency appeared to be obstetric and the subsequent cardiac arrest occurred virtually at the last moment before arrival at the RWH. By then Ms Johnson was *in extremis*. Having regard to the extremely high mortality rate of ruptured splenic artery aneurysm, it is likely the die was cast by that time and Ms Johnson's condition was irretrievable.

53. At an earlier time, the family raised concerns about the adequacy of resuscitation attempts by ambulance paramedics during transportation to hospital following Ms Johnson's collapse on the morning of Monday 22 March 2010. I do not believe those concerns were ultimately pursued; the fact of the matter is that those endeavours, in the emergency that confronted the paramedics could not reasonably be criticised, on the contrary.

54. In my view, there are only two issues involving Ambulance Victoria requiring further attention: communications that prevailed at the time of Ms Johnson's death and any subsequent refinements/enhancements; and the issue of ongoing training and education.

55. The particular relevance of the first issue in this case was the communication between the paramedics transporting Ms Johnson, and the hospital. Information was passed from MICA paramedic Mr Travis Quirk to his colleague, MICA paramedic Gibson – from MICA paramedic Gibson to the communications clinician Mr Llewellyn – and from Mr Llewellyn via telephone to the hospital. Mr Quirk stated he could not precisely recall what was related to the communication clinician because his "attention was elsewhere", desperately trying to resuscitate his very ill patient. He anticipated it might take around 10 minutes to get to the hospital. The message relayed to Assistant Unit Manager Ms Catherine White was that they (the hospital) had at least 13 minutes to get ready to receive the patient. Although, the basis of the suggested 13 minutes window is unclear to me. It may have been something lost in the translation, but the upshot of that estimate was that when Mr Quirk arrived with his patient in cardiac arrest, "no one was ready to receive" his patient.

56. Although the communication clinician indicated he would "ring back", no further communication was received by Ms White after the first call.

57. There is some area of conflict in the evidence of Mr Quirk and Ms White. It is clear that there was no one in the ambulance receiving area to meet the ambulance on arrival and the

patient was wheeled in to the Emergency Department by the ambulance paramedics. Mr Quirk "guesstimated" the time from his arrival until hospital staff took over resuscitation was 2 – 3 minutes. He claimed the first to arrive was an anaesthetist and Ms Johnson was taken into the Resuscitation Room, a small room off the Emergency Department. When the hospital received the call that an ambulance was en route with a very sick patient a Code Green (an obstetric emergency code) was called; it was apparently considered, reasonably in my view, an emergency caesarean section would be performed in the Birthing Suite's theatre due to an ante-partem haemorrhage.

58. Ms White, who was in the Triage area of the emergency department, stated she spoke to the Senior Nurse in the Birthing Suite to arrange for an Obstetrician Registrar, an Anaesthetist Registrar and a Paediatric Registrar to be ready to receive the patient. However, Ms White related how as soon as she saw Ms Johnson being brought into the Emergency Department she called a Code Blue. As Mr Quirk continued resuscitation measures, hospital personnel arrived and took over aggressive resuscitation. A decision was quickly made to proceed with an emergency caesarean section in the resuscitation room, with Ms Johnson still on the ambulance trolley. Not surprisingly in my view, not all the required equipment was immediately available in the resuscitation room for that procedure, which was expected to be performed in the Birthing Suite theatre.

59. This cascade of events has to be viewed in the circumstances prevailing at that time without the not inconsiderable benefit of hindsight, NOT in the somewhat artificial clinical setting that is the courtroom environment some years later.

60. I believe the procedure was in the circumstances, carried out in a reasonably timely manner. Importantly, I do not conclude perceived delays, as such altered the course of events. Dr Nicola Yuen, the Director of the Women's Emergency Care Centre (WECC) at the RWH detailed refined enhanced operation practice and procedures which have been implemented since the events the subject of this inquest. I include a short excerpt from Dr Yuen's statement relating to the issue of communication. She stated:

> *"In November 2013, the WECC obtained an ASV radio which allows the WECC staff to directly communicate with ASV paramedics who are attending the patient. Accordingly, if a patient's condition is changing on route [sic] to the WECC then we can be contacted by the ASV and a discussion can be held regarding the appropriate hospital destination for the patient. In addition we can offer specialist clinical advice to the paramedics that may improve a patient's condition whilst en route."*

In very broad terms, if an incoming patient is not in cardio-respiratory arrest, a Medical Emergency Team (MET) is now immediately available to provide medical information. Whereas if an incoming patient is in cardiac arrest requiring resuscitation the enhanced communication regime provided can advise the ambulance paramedics to transport the patient directly to Royal Melbourne Hospital (RMH), rather than the RWH. A "trauma call" is then made so that an appropriate resuscitation team (including an Obstetrician Registrar from the RWH) is assembled ready to treat the emergency patient. Criteria have been established which dictate the appropriate course of action.

Dr Yuen also advised protocols established since the relocation of the RWH to the new facilities. RMH surgeons can attend WECC on short notice if required and access to the RMH ICU is now readily available. I cannot say if the final tragic outcome for the Johnson family would have been different had these new technologies and arrangements been in place in March 2010.

61. Mr Winneke, counsel for Ambulance Victoria, called Mr Anthony Armour, a vastly experienced MICA paramedic to inform the court specifically on revised practices, protocols and clinical guidelines in relation to obstetric presentations (if one can call them that) and enhanced training. The revised guidelines were developed in consultation with specialist obstetricians. The refinements/enhancements were referred to as a "suite of changes" that involve continuing education of paramedics. It is clear that Ambulance Victoria have been pro-active in relation to these matters (as I have generally perceived them to be on other occasions). More often than not issues that otherwise may well have been the subject of coronial recommendations have been indentified, examined, addressed and promulgated, prior to the matter getting to court.

62. Similarly, Mr Armour (and Mr Quirk for that matter) advised the court of advanced communications now in place that were not in place at the time of the events the subject of this inquest. In essence, ambulance paramedics can now directly communicate by radio with the receiving hospital whilst en route to advise the hospital what they can expect to receive upon arrival.

63. In accordance with established protocols Ambulance Victoria undertook a comprehensive review of the circumstances surrounding the death of Ms Johnson. In particular their Clinical Practice Guidelines were reviewed. Significantly, a new set of Clinical Practice Guidelines have been developed for obstetric patients including guidelines concerning "hospital destination recommendations for obstetric patients with severe medical

complications"; the guideline is CPG 00201. A copy of the guideline was tendered at the hearing and forms part of the formal record of the proceedings. Mr Armour raised an interesting point. He said that in each case a judgement has to be made by the attending paramedic/s. He opined that it can be counterproductive to "slavishly comply" with guidelines. With that contention I agree; guidelines should not be too prescriptive, professional judgements by well trained paramedics will always remain the basis of critical decisions taken. I am satisfied ambulance paramedics undertake strenuous ongoing education and training.

64. In my considered view, the performance of ambulance paramedics involved in the care, treatment and management of Ms Johnson could not reasonably be criticised. I firmly believe Mrs Johnson's gracious expression of gratitude meant a lot to the ambulance paramedics and other Ambulance Victoria personnel present at the court. Whilst it is well understood that the inquest process is difficult for families we should not underestimate the impact of appearing at an inquest in circumstances where ones performance is the subject of criticism, warranted or otherwise.

65. The thrust of Mrs Marge Johnson's submission at the completion of evidence was that nobody "took management" of her daughter's treatment, which resulted in "lost opportunities" to treat and save her life. Mrs Johnson maintains that Dr Frawley merely accepted Dr Lee's diagnosis of the pain being musculoskeletal related. As stated earlier, I believe Mrs Johnson has placed much reliance on Dr Matthew Lynch's observation that the prospect of ruptured (or rupturing) splenic artery aneurysm is "well recognised". The entire weight of evidence is that it is an extremely rare condition; so rare indeed that one could not, in the precise circumstances that prevailed here, reasonably be critical of a doctor (including an obstetrician) not diagnosing (even differentially) the prospect of a rupture.

66. I think it likely that after the circumstances surrounding the untimely death of Ms Michelle Johnson are circulated through the obstetrics community by the College of Obstetricians, the same assertion could not reasonably be claimed in future.

RECOMMENDATIONS

Pursuant to section 72(2) of the **Coroners Act 2008**, I make the following recommendation(s) connected with the death:

1. I am advised by Dr Matthew Lynch that Ms Johnson's case was the subject of discussion at a recent meeting of the Maternal Mortality and Morbidity sub-committee of the Consultative Council on Obstetric and Paediatric Mortality and Morbidity. The sub-committee have made the following recommendation:

> *"Intra-abdominal haemorrhage (e.g. ruptured splenic artery aneurysm, ruptured liver) should be considered as part of the differential diagnosis when a pregnant woman presents with severe abdominal pain especially if she requires narcotic analgesia"*

I adopt that recommendation for the purposes of this finding; a copy of which I propose be provided to the College of Obstetricians and Gynaecologists and, as an "interested party" to the proceeding, to the Royal Women's Hospital.

I direct that a copy of this finding be provided to the following:

Mr Robert Stojcevski

Mrs Marge Johnson

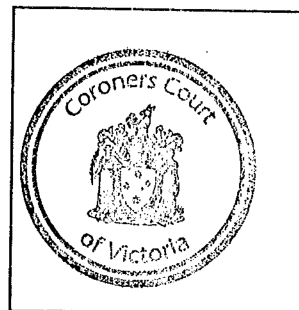
Mr Colin Grant, Ambulance Victoria

Ms Mia Campbell, Avant Law (Dr Sze Lee)

Ms Lisa Ridd, Minter Ellison (RWH)

Ms Samantha Downes, Lander & Rogers (Ambulance Victoria)

Signature:



PHILLIP BYRNE
CORONER
Date: **21 March 2014**