QUEENSLAND COURTS

Coroners Court of Queensland

FINDINGS OF INVESTIGATION

CITATION:	**Non-inquest findings into the death of Matthew Douglas McLachlan**
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Brisbane
DATE:	30 July 2018
FILE NO(s):	2017/2390
FINDINGS OF:	Christine Clements, Brisbane Coroner
CATCHWORDS:	CORONERS: 28 male, paraplegia, opioid pain medication dependency, being monitored, admitted to PA Hospital for urinary tract infection, self-administered additional pain medication, acquired externally to hospital without disclosure of concurrent hospital treatment , died in hospital due to inadvertent overdose, mixed drug toxicity

Introduction

1. Matthew Douglas McLachlan lived at 59 Oates Avenue Holland Park in Queensland. He died in the Princess Alexandra Hospital in Brisbane in Queensland on 7 June 2017. His death appeared to be possibly related to self-administered medication and the matter was reported to the coroner. Matthew was 28 years of age at the time of his death.

Background circumstances

2. Matthew McLachlan was a wheelchair-bound person due to paraplegia. He was involved in a car crash in 2009 and sustained traumatic spinal cord injury. He was admitted to the Princess Alexandra Hospital on 26 May 2017 for treatment due to possible urinary tract infection. He was treated in Ward 5 B and administered a fentanyl patch (75 µg per hour) as pain relief. The fentanyl patch was replaced every two days. He was also administered 5 mg oxycodone tablets for pain relief when required, not more than four times per day. He also received 5 mg tablets of Valium every 8 hours upon request due to numerous muscle spasms.

3. On 1 June 2017 he was still an inpatient at the hospital. However, although not discharged, he had regularly left the ward and the hospital for a couple of hours each day and would return for treatment relating to his urinary tract infection.

4. At about 08:34 on the morning of 1 June 2017 police from the Holland Park police station intercepted Matthew McLachlan driving his Ford Falcon sedan at Lawn Street in Holland Park. The vehicle was unregistered. His mother confirmed she subsequently paid the infringement notice fine.

5. On 2 June a peripheral inserted central catheter “PICC line” was inserted at the hospital. The catheter was checked and was flushing correctly. That afternoon it was again checked and Mr McLachlan was also assessed. There was no indication that he had any sign of intravenous drug use evident on either arm.

6. Subsequently on the three following days the PICC line was flushing correctly.

7. On the morning of 6 June 2017 the nurse had difficulty flushing the PICC line and this was documented in the record. Intravenous antibiotics to treat urinary infection were administered at 6 PM and 10 PM that evening. At about 8:30 that evening he was given 1 olanzapine 10 mg tablet for anxiety. He was also given 15 mg tablet of oxybutynin for treatment of bladder dysfunction. One 200 mg Quetiapine tablet was also administered. A quarter strength dose of 25 µg clonidine was provided to assist with management of blood pressure.

8. Subsequently it was ascertained that Matthew McLachlan contacted his mother that day. Catherine McLachlan confirmed she picked up her son from the hospital. He was complaining of pain and asked her to take him to his usual treating general practitioner, Dr Grant. On the way to the doctor he was crying uncontrollably. She waited for him in the Medical Centre carpark. During this time the hospital had called her advising her that they were ready for Matthew to have his next scan.

9. She said when her son returned to the car about half an hour later he was still in a lot of pain. He said he had already dropped the script into the pharmacy next door to the doctor. He got into the car while she went back to the pharmacy to pick up the medication. She recalled it was an antibiotic, diazepam and another pain relief

medication which she thinks was oxynorm. She returned her son to the hospital and he took the medication with him.

10. She spoke with him later that day and asked whether he was in trouble about being late for his scan appointment. She spoke with him that evening but that was the last time.

11. Catherine McLachlan recalled discussing with her son the possibility that he return home and the hospital arrange a nurse to attend to administer the required drugs intravenously via the PICC. Matthew indicated to her he did not want to go home. She thought this unusual as previously he felt his anxiety and depression was worse when he was in hospital.

12. She told police she was aware of "an occasion" when he had taken a drug of some kind but she did not know any details. She said her son initially had taken his medication as required but she acknowledged that over time he became more dependent on the fentanyl pain relief patches. As the medication wore off he would become anxious and felt pain again. She was aware Dr Grant was trying to lower the dose and that the hospital was also giving the same advice.

13. It appears in retrospect that Matthew's mother was unaware of the extent of his dependency that had developed over time.

Overnight shift 22:00hours 6 June- 07:30hours 7 June 2017

14. A statement was obtained from the registered nurse who worked the overnight shift on 6–7 June 2017. RN Adina was aware Mr McLachlan was being treated for an infection via intravenous antibiotic medication. At approximately 22:45 she flushed the PICC line. Mr McLachlan was asleep at the time. She recalled the line was "sluggish".

15. At about 04:40 he complained of nausea and she administered ondansetron (4 mg) intravenously. Again, the PICC line was difficult to flush prior to administration of the medication. She aspirated the PICC line intending to get "flashback" but without success. She observed the PICC insertion site had blood around it. Mr McLachlan was awake and responsive at the time. He was speaking in sentences.

16. At 4:45 she checked on him again. He was still complaining of nausea. She administered a second dose of ondansetron. She noted the record accordingly and left his room at about 05:05.

17. At about 05:30 she entered his room and found him unresponsive. She called a Code Blue requesting emergency assistance, including the rapid response team. She commenced cardiopulmonary resuscitation until help arrived. Cardiopulmonary resuscitation was commenced immediately and adrenaline was administered. There was no response. He was intubated and defibrillated but could not be resuscitated.

18. Efforts continued with additional emergency staff but was unsuccessful. Matthew McLachlan was declared deceased at 06:15 and 7 June 2017.

19. R.N. Adina had cared for Mr McLachlan on a few previous occasions during the two-week period leading up to his death. She was aware he had a drug history noted on his medical chart. However, she did not observe any behaviour which would indicate to her that he was using illicit drugs at the time. He was very polite and his behaviour appeared consistent over the period she was caring for him. At no time did he indicate he was using other medication or accessing any illicit drugs. Nor did he mention to her

that he had misused any drugs, including prescribed drugs. She was also aware during this admission he would leave the hospital most mornings or afternoons. In her observation he would return and appear in the same state as when he had left.

Discovery of additional medication and syringe

20. At about 06:20 that morning of 7 June a nurse located 3 syringes and 2 pairs of scissors in the bedside drawer next to Matthew's bed. One of the syringes contained a cloudy liquid. There was an opened packet of 5 mg diazepam tablets. Nine tablets were missing.

21. There was an opened packet of 20 mg Oxynorm capsules. All 20 capsules were missing.

22. There were also loose capsules and tablets of unknown identification/strength located in the drawer. Matthew's death was reported to the coroner.

Cause of death

23. Autopsy examination was conducted by the forensic pathologist Dr Ong on 12 June 2017.

24. A significant medical history was noted including the history of motor vehicle accident causing traumatic spinal cord injury. Recurrent catheter associated urinary tract infections occurred. He had chronic back pain requiring opioid treatment. He had become dependent on opioids. The record indicated he was a known intravenous drug user.

25. He had been treated for deep vein thrombosis previously. He had been diagnosed with anxiety, depression and panic disorder. There was a grade 4 pressure ulcer on his left buttock

26. The autopsy report documented in summary form his treatment whilst an inpatient.

27. The pathologist noted on 6 June 2017 he visited his general practitioner but did not inform the doctor he was a patient of the hospital at the time. He complained of pain and was provided with antibiotics as well as diazepam and oxycodone.

28. The pathologist noted there was no evidence of acute urinary tract infection post-mortem. The lungs were heavy and showed presence of numerous foreign crystalline material which is consistent with intravenous drug use over time.

29. Toxicology analysis detected numerous drugs including:

    (i) Toxic levels of diazepam and oxycodone
    (ii) Fentanyl concentration in both therapeutic and toxic ranges
    (iii) Sertraline, olanzapine and paracetamol within non-toxic range
    (iv) Metabolite of cannabis.

30. Dr Ong noted the diazepam, oxycodone and fentanyl acted synergistically resulting in augmentation of the adverse effects of respiratory depression and would have been responsible for Matthews's death.

31. The presence of small foreign particles in the blood vessels of the lungs were indicative of the introduction of undiluted substance from recent intravenous administration of drugs. These had not been properly diluted and would therefore block the smaller

vessels of the lungs. The particles themselves could cause an abrupt increase in pulmonary arterial pressure and exert stress on the heart.

32. The presence of this material in the blood vessels indicated that administration of the drug had occurred shortly before death. There were also foreign body granulomata indicative of similar previous administration of drugs.

33. Finally, the pathologist noted there was no evidence of any acute infection or natural disease that could otherwise cause or contribute to his death.

34. The pathologist concluded at Douglas McLachlan died due to mixed drug toxicity.

Conclusion

35. All of the circumstances and evidence are consistent with Matthew being drug dependent and actively sourcing various drugs including whilst an inpatient at the Princess Alexandra Hospital.

36. His treating general practitioner Dr Peter Grant provided a statement. He confirmed that he consulted with Matthew on Tuesday 6 June 2017. Matthew had a fever with his temperature measured at 38.1°. A urine sample was cloudy. Matthew stated he had fallen about half a metre when transferring from bed to his wheelchair on the previous day. He said he was experiencing pain in his mid-spinal area. He said his usual fentanyl skin patch medication was insufficient to control his pain and he requested stronger pain relief in addition to the fentanyl patch.

37. His blood pressure was measured and was elevated. His pulse rate was similarly elevated. The doctor physically examined him. There was no physical evidence of injury but Matthew identified the area he said was causing him pain. He was referred for x-ray.

38. On the basis of this assessment Dr Grant considered it was appropriate to provide additional pain relief. There had been recent consultations during which it was discussed that a plan to gradually reduce his dose of fentanyl was appropriate. As Matthew had been compliant with this proposal the doctor therefore considered the request on 6 June was reasonable in all the circumstances.

39. He issued a prescription for Antenex 5 mg and Oxynorm 20 mg capsules. Both medications were to be taken as required to a maximum of 1 tablet every 12 hours. He was advised to only take the Oxynorm if the pain remained severe.

40. Dr Grant arranged for the urine sample to be tested. He prescribed an antibiotic to be commenced immediately. He referred Matthew for x-ray. Subsequent results confirmed the presence of enterococcus faecium and Candida albicans.

41. Dr Grant confirmed Matthew attended the consultation alone. At no time did Matthew disclose to the doctor or his staff that he was an inpatient at the Princess Alexandra Hospital on that day. Nor did he inform the doctor that his mother had driven him from the spinal unit to the medical practice to obtain pain relief. His mother did not accompany him to the consultation. No information was provided back to the hospital as Dr Grant was unaware that Matthew was a patient at the time.

42. A statement was also obtained from Dr Runnegar who is an infectious diseases management physician. She has worked in that position for 7 years, supervising registrars and managing patients with infections. She has worked at the Princess Alexandra Hospital for 14 years.

43. She recalled on 30 May 2017 she attended upon Matthew McLachlan with her registrar, Dr Satyaputra. She was standing in for another physician with other commitments that morning. She reviewed Matthew's history and discussed his treatment plan with him. Four weeks of intravenous antibiotic therapy via PICC line was required. Without such treatment there was a high mortality rate. A pharmacist and medical student were also present at the consultation. In the course of the consultation there was discussion of Matthews' intravenous drug use history and the possibility that this behaviour may have caused his blood stream infection. It was also a possible barrier for administration of intravenous antibiotic therapy at home. Dr Dunnegar's recollection was that Matthew stated he had injected OxyContin a few weeks previously in company of a friend or neighbour who had since moved away. He said he injected drugs infrequently and did not intend to do so again. This was noted on the medical chart to inform all treating doctors and nurses. Her impression at the time was that Matthew was quite open and contrite. He was pleasant and easy to engage in communication. She considered it was probably safe for him to receive intravenous antibiotic therapy at home and they sought the opinion of the addiction medicine physician, Dr Feeney who agreed with this plan.

44. The PICC line was then inserted on 2 June. Dr Runnegar noted the diagnosis of staphylococcus aureus in his blood stream was established. At the time of her review she thought staphylococcus aureus BSI was probable.

45. This may have developed as a consequence of intravenous drug use or his long-standing pressure area. This was consistent with his admission to her that he had used drugs intravenously a few weeks prior to admission to hospital. She also noted he was undernourished.

46. She could not recall having seeing Matthew prior to 30 May 2017 although it was possible due to his previous admissions to the infectious diseases ward.

47. The hospital was aware of Matthew McLachlan's acknowledged history of previous intravenous drug use. However it is not usual practice to search patient's belongings for banned substances unless it is suspected that there are illicit substances being used. There had been no appearance or behaviour indicating Matthew had been accessing or using other drugs during the course of his admission. He had been compliant and polite and there was no suspicion of inappropriate access or use of other medication. Had this been the case and illicit drugs were suspected, then staff would have preceded in accordance with the hospital's Illicit Drug Management Procedure.

48. In conclusion it is noted that Matthew had developed a dependency upon opioid pain relief in the context of a major spinal injury following a motor vehicle accident. The hospital and his treating general practitioner were aware of this and alert to the risks that had to be managed in treating his serious infection. In particular the necessity of a PICC line to administer intravenous antibiotic therapy was a risk which was considered and discussed with the treating team and Matthew.

49. His mother appears to have been less aware of the extent of her son's dependency on opioid pain relief and no doubt more easily emotionally affected and able to be manipulated by her son's expression of pain and request for assistance to access his general practitioner for assistance.

50. Unfortunately Matthew deliberately withheld information from his general practitioner and failed to inform him he was an inpatient at the Princess Alexandra Hospital and receiving a range of pain medication in addition to intravenous antibiotic medication

via a PICC line. He told the doctor he had fallen on the previous day when transferring from the bed to his wheelchair. He said he had pain in his back.

51. The general practitioner examined Matthew, noting he was in his wheelchair with a urinary catheter in situ. Matthew had already collected a sample of urine for the doctor which was noted to be cloudy. The doctor noted a vague area of red skin on his back around the thoracolumbar junction, which was consistent with the history provided by Matthew. There was no bruising or haematoma. It appears that the general practitioner physically examined Matthew's mid spinal area, but there was no observation made of the PICC site. The general practitioner prescribed additional pain medication (Antenex5 5 mg and oxynorm 20mg capsules). This combination had previously been prescribed by the doctor in conjunction with the fentanyl without causing any problem. He was however unaware of the medication being accessed by Matthew McLachlan concurrently as an inpatient at the Princess Alexandra Hospital.

52. Matthew died due to mixed drug toxicity. There is nothing to suggest he intended to cause his own death; rather, this was an inadvertent overdose of a combination of medications, some of which he had deliberately dishonestly obtained and self-administered with fatal consequence. His death occurred in the context of a dependency which developed after a tragic life changing spinal injury sustained in a motor vehicular accident.

Chris Clements

Coroner