WORKERS COMPENSATION COMMISSION

CERTIFICATE OF DETERMINATION

Issued in accordance with section 294 of the *Workplace Injury Management and Workers Compensation Act 1998*

Matter Number:	**1259/19**
Applicant:	**Susanne Jennifer Larkings**
Respondent:	**Secretary, Department of Family and Community Services**
Date of Determination:	**15 November 2019**
Citation:	**[2019] NSWWCC 368**

The Commission determines:

1. Award for the applicant in respect of the surgery proposed in the form of lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws.

A brief statement is attached setting out the Commission's reasons for the determination.

Jane Peacock
Arbitrator

I CERTIFY THAT THIS PAGE AND THE FOLLOWING PAGES IS A TRUE AND ACCURATE RECORD OF THE CERTIFICATE OF DETERMINATION AND REASONS FOR DECISION OF JANE PEACOCK, ARBITRATOR, WORKERS COMPENSATION COMMISSION.

S Naiker

Sarojini Naiker
Senior Dispute Services Officer
As delegate of the Registrar

STATEMENT OF REASONS

BACKGROUND

1. By Application to Resolve a Dispute (the Application) Ms Larkings (the applicant) seeks compensation under section 60 of the *Workers Compensation Act 1987* (the 1987 Act) in respect of surgery proposed in the form of lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws as a result of injury on 23 June 2017 to her lumbar spine.

2. The respondent is the Secretary, Department of Family and Community Services (the Department). The relevant insurer for the purposes of workers compensation is QBE Insurance (Australia) Ltd Agent for ICARE Insurance for NSW (TMF) (the insurer).

ISSUES FOR DETERMINATION

3. There is no dispute that Ms Larkings injured her lumbar is spine at work on 23 June 2017. She came to a vertebroplasty at the L1 level performed on 5 October 2017 by Dr Coughlan, neurosurgeon, and paid for by the insurer. The Department concedes that Ms Larkings suffered a fracture at L1 as a result of injury on 23 June 2017.

4. Ms Larkings' treating neurosurgeon Dr Coughlan has recommended surgery in the form of lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws. Ms Larkings seeks to proceed with this surgery.

5. The Department does not dispute that the proposed surgery is reasonably necessary.

6. The Department disputes that the proposed surgery results from the injury at work on 23 June 2017. This is because the department disputes that Ms Larkings injured her back at the L4/5 level in the work injury on 23 June 2017.

PROCEDURE BEFORE THE COMMISSION

7. The parties attended a conciliation arbitration in Newcastle. Both parties were represented by counsel with Mr Moffitt appearing for Ms Larkings and Mr Hunt appearing for the Department. I am satisfied that the parties to the dispute understand the nature of the application and the legal implications of any assertion made in the information supplied. I have used my best endeavours in attempting to bring the parties to the dispute to a settlement acceptable to all of them. I am satisfied that the parties have had sufficient opportunity to explore settlement and that they have been unable to reach an agreed resolution of the dispute.

EVIDENCE

Documentary evidence

8. The following documents were in evidence before the Commission, and taken into account in making this determination:

    For Ms Larkings :

    (a) Application and all attached documents admitted by consent.

    (b) Application to Admit Late Documents dated 4 October 2019 (tendered at the arbitration) contianing further report of Professor Ghabrial and emails to

Dr Coughlan requesting a report, admitted over objection (see below at paragraph 20 and following).

For the Department

(a) The Reply and all attached documents with the exception of the report of Dr Sekel which are not pressed and not admitted.

(b) Application to Admit Late Documents being reports of Dr Marchart dated 13 May 2019 and 12 August 2019 admitted by consent.

Additional evidence

9. The matter was referred by consent to an Approved Medical Specialist (AMS) for opinion as to whether the surgery proposed in the form of lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws is reasonably necessary as a result of the injury on 23 June 2017. The matter was referred by the Commission to AMS, Dr Mark Burns who issued a Medical Assessment Certificate (MAC) dated 17 July 2019.

Oral evidence

10. Ms Larkings did not seek leave to adduce further oral evidence and counsel for the Department did not seek leave to cross-examine Mr Larkings.

FINDINGS AND REASONS

11. There is no dispute that Ms Larkings injured her lumbar spine at work on 23 June 2017.

12. She has previously come to a vertebroplasty on her lumbar spine (at L1) as a result of the injury. This procedure was performed by Dr Coughlan on 5 October 2017 and was paid for by the insurer.

13. Ms Larkings now seeks to have the further surgery proposed by Dr Coughlan in the form of lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws.

14. It is not in dispute that the proposed surgery is reasonably necessary. The dispute is whether the proposed surgery results from the injury on 23 June 2017.

15. The matter was referred by consent to an AMS for opinion as to whether the surgery proposed in the form of lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws is reasonably necessary as a result of the injury on 23 June 2017.

16. The matter was referred by the Commission to AMS, Dr Mark Burns who issued a medical assessment certificate (MAC) dated 17 July 2019.

17. The MAC issued by Dr Burns is in evidence in these proceedings. It is a non-binding opinion and as such is evidence that has to be weighed in the balance with all of the other evidence before me.

18. Dr Burns' opinion was that the proposed surgery was reasonably necessary as a result of the injury on 23 June 2017. Dr Burns opined as follows:

> "I believe that the initial fall on the 23.06.17 led to a fracture of the L1 vertebral body but also aggravated and accelerated the degenerative change at L4/5. Following the fall, she developed bowel and bladder problems even before the vertebroplasty was carried out.

In conclusion I believe that the fall on the 23.06.17 aggravated the pre-existing degenerative change at L4/5 as well as the instability at that level and was at least partially the cause of the development of her spinal cord compressive symptoms. Certainly, the pre-existing degenerative change and spondylolisthesis at L4/5 may have predisposed to the development of the spinal cord symptoms but certainly the aggravation from the fall would be an accelerating factor and cause."

19. The matter remained disputed by the Department and was listed for a further conciliation/arbitration.

20. At that event the Department sought to tender a further medical opinion from Dr Marchart dated 12 August 2019 that was said to respond to the opinion of Dr Burns.

21. Counsel for Ms Larkings consented to the admission of that report on the basis that Ms Larkings have the opportunity to have a further report from her treating specialist Dr Coughlan and sought an adjournment of the conciliation/arbitration for this purpose.

22. The matter was listed for a further conciliation/arbitration on 16 October 2019.

23. At that event Ms Larkings tendered evidence from her solicitor that repeated attempts were made to obtain a report from Dr Coughlan. Dr Coughlan's office advised Ms Larking's solicitor that his busy surgical practice precluded him from providing the requested report. In lieu thereof, Ms Larking's solicitor requested a further report from Professor Ghabrial, the Independent Medical Expert (IME) qualified on her behalf. Ms Larkings sought to tender that report at the arbitration. This was objected to by counsel for the Department on instruction from the Department. The sole basis of the objection was that the report was late. Counsel for the Department was unable to point to any prejudice that the Department would suffer if the report was admitted. Indeed, counsel for the Department conceded that there was no prejudice as the opinion of Professor Ghabrial is consistent with the opinion of the AMS, Dr Burns. Given the report arose purely as a product of Ms Larking's consent to the Department's late report and absent any prejudice, the report was admitted.

24. The dispute argued before me was whether the surgery, which was conceded to be reasonably necessary, results from the work injury on 23 June 2017.

25. I must make a determination in this case on the balance of probabilities on the evidence and in accordance with the law. That is, I have to weigh all of the evidence before me and make a determination as to whether it is more likely than not that the proposed surgery results from the injury on 23 June 2017.

26. Turning then to an examination of the evidence in this case.

27. Ms Larkings gave evidence in a statement dated 14 March 2019 as follows:

> "7. On 23 June 2017, while I was working the morning shift, I suffered an injury. I was rostered onto work a double shift that day.
>
> 8. At approximately 12.05pm I was existing a 12-seat Mini Bus in which I was transporting clients.
>
> 9. The Mini Bus is very difficult to get in an out of and to get into the driver's seat I have to put my elbow against the seat and then pull myself up while holding onto the steering wheel.

10. The bus is particularly high off the ground.

11. To get out of the vehicle I effectively have to freefall to the ground.

12. I have not been taught any other way to get in or out of the vehicle.

13. Although I have been driving these vehicles for over six years, we don't always have the same vehicles and this vehicle is always the most difficult to get in and out of.

14. Whilst getting out of the vehicle, I was attempting to maintain my balance whilst holding onto the door but I landed heavily onto the ground with my right leg, which gave way and I jarred my back.

15. I immediately felt sharp lower back pain and I initially thought that I pulled a muscle and that it would get better.

16. However, this was not the case."

28. Ms Larkings has given clear evidence about the manner in which she had to exit the particular bus that was being used on 23 June 2017. She gave evidence that she "effectively" had to "freefall to the ground".

29. I note that Ms Larkings was not cross-examined about her evidence. Moreover, there was no evidence put on by the Department to contravert in any way Ms Larking's evidence about the difficulty of entering and exiting the particular bus that was being used on 23 June 2017. There was no evidence put on by the Department to contravert Ms Larking's statement that to exit this particular bus she had to "freefall" to the ground.

30. Furthermore, I note that Ms Larking's evidence in her statement about the manner of her descent from the bus and the immediate severe pain in her back on impact with the ground is consistent with that which she contemporaneously reported to her treating general practitioner Dr Nakhla when she saw her a few days after the injury. Ms Larkings gave evidence in her statement that the injury happened on Friday (23 June 2017). She attempted another shift on Saturday. She continued to be in pain. She tried to get into see her usual treating general practitioner Dr Nakhla (who had been her treater for 12 years) on the Monday but could not get an appointment until the Tuesday (27 June 2017). The injury was reported to Dr Nakhla. The consistency between Ms Larkings evidence in her statement and the report to her Dr Nakhla a few days later is evident in the "early intervention fax" completed by Dr Nakhla at the request of the insurer on 4 July 2017. In this respect, Dr Nakhla is asked and answers as follows:

> "How did the injury occur as related to you by Ms Larkings? What symptoms did Ms Larkings present with?
>
> Ms Larkings was getting off the bus while on duty but it is a high bus which required her descend unsupported for a distance -felt severe pain immediately."

31. There is no dispute that Ms Larking injured her back on 23 June 2017.

32. Ms Larkings gave evidence that she felt immediate pain in her back from the injury. She hoped it would resolve. When it did not resolve, she saw her Dr Nakhla within a few days of injury, on the following Tuesday 27 June 2017.

33. In light of the severity of her symptoms, she was referred by her Dr Nakhla for a CT scan which took place on 29 June 2017.

34. On 4 July 2017, Dr Nakhla was sent by the insurer an "early intervention fax" which posed a series of questions which Dr Nakhla answered.

> "What is the initial diagnosis?
> soft tissue mid/lower back – compression fracture L1 and L3/4 disc prolapse with L sided nerve involvement. Spinal canal stenosis.
>
> How did the injury occur as related to you by Ms Larkings. What symptoms did Ms Larkings present with:
> Ms Larkings was getting off the bus while on duty but it is a high bus which required her descend unsupported for a distance -felt severe pain immediately.
>
> Did the reported mechanism of injury match the symptoms and diagnosis? If yes please provide your clinical reasoning to the correlation.
> Yes. After clinical examination showed Mrs Larkings symptoms are very much to be resulted by such injury.
>
> What are your initial treatment recommendation?
> Pain killer… referred to chiropractic treatment. Neurosurgeon will be needed ASAP.
> …Physiotherapy and hydrotherapy may be beneficial."

35. I note that there is contemporaneous report to the general practitioner about the mechanism of injury and the severe pain felt "immediately" by Ms Larkings upon her heavy impact with the ground. The general practitioner identifies at that very early stage that the lumbar levels impacted extend beyond the L1 level.

36. The general practitioner advised the insurer of the need for an urgent referral to a neurosurgeon. The referral to neurosurgeon Dr Coughlan was made. Ms Larkings gave evidence that there was about a month's delay before she could secure an appointment with Dr Coughlan because of the busyness of his practice.

37. She first saw Dr Coughlan on 4 August 2017. He referred her for a bone scan which took place on 7 August 2017. He reviewed Ms Larkings again on 21 August 2017 at which time he recommended a vertebroplasty. Prior to approval of this procedure the insurer sent Ms Larkings to Dr Cassiker whom she saw on 6 September 2017. Dr Cassiker supported the procedure proposed for L1.

38. On 5 October 2017, she had a vertebroplasty performed by Dr Coughlan. The insurer paid for this procedure.

39. This procedure did not provide meaningful relief. Her symptoms persisted and worsened.

40. I note that Ms Larkings has given evidence that from the time of her injury her symptoms persisted and worsened. She was not cross-examined about this evidence. This evidence is consistent with the clinical notes of both the general practitioner and Dr Coughlan that very clearly chart a contemporaneous report of injury, severe symptoms of pain, the onset of bowel and bladder symptoms and the progression of symptoms into the right leg. The evidence clearly shows that these symptoms were not present before the injury. Whilst there is some reference to some back pain prior to injury and some treatment with panadeine forte, which counsel for the Department made much of in his submissions, this is episodic at best. Dr Oxley, another treating general practitioner has reviewed Ms Larking's clinical records and, in a letter dated 26 February 2019 says that they do not paint a clinical picture of a patient being treated for back pain. He writes:

"Looking at the notes the record does not indicate a woman with a back problem. I find a mention but no specifics from Dr Nakhla."

41. Instead, there is a clear picture on the evidence of Ms Larkings, prior to injury, being able to do her job as a disability support worker (for many years prior to injury) with all its physical demands and live independently on an acreage property with little problems with her back. Post-injury, she has been unable to return to work and there is a very clear evidence of a persistence and worsening of symptoms since the injury which has been disabling.

42. Ms Larkings gave evidence that after the injury she began to experience bowel and bladder symptoms which she did not have prior to the injury. Ms Larkings gave evidence as follows:

> "23. As a result of the accident I have had very significant bowel and bladder control issues for which I was referred to Dr Richard Morrow, who practices at the same centre as Dr Nakhla (Ms Larking's treating GP). Dr Morrow has provided medication in the form of Macrogol and electrolytes. I am now also taking Kelfex and Ural."
>
> …
>
> "25. Unfortunately, I had to wait approximately four weeks for an appointment with Dr Coughlan and during that time I had other treatment, including chiropractic therapy, and at those session, the chiropractor used a machine on me, similar to a TENS machine.
>
> 26. Dr Coughlan informed me that my bowel and bladder problems are due to the injuries to my spine. I never had these problems before the accident."

43. Ms Larkings was not cross-examined about her evidence. There is no evidence that there were any bowel or bladder problems prior to injury.

44. Ms Larkings gave evidence that Dr Coughlan recommended an injection into L1 (the vertebroplasty).

45. Ms Larkings gave evidence as follows:

> "28. However, the insurer did not approve this immediately and I had to see Dr Cassiker at their request and this appointment occurred in 6 September 2017 and it was only after that appointment that the injection occurred and that happened on 5 October 2017.
>
> 29. the injection did not provide any meaningful benefit. I notified Dr Coughlan that my bladder and bowel problems were getting worse.
>
> 30. As I was not getting any better, Dr Coughlan arranged an MRI scan in mid-October 2017 and after that he told me that I needed an operation which is an anterior lumbar fusion."

46. Ms Larking's evidence is consistent with the reports of Dr Coughlan that are in evidence before me.

47. She was reviewed by Dr Coughlan on 13 October 2017 who provided a report dated 19 October to the DR Nakhla as follows:

"This is an update on Susanne Larkings. Susanne is complaining of very significant ongoing right sided lower back pain. She did have the L1 vertebroplasty. I am concerned that given her bladder and bowel dysfunction some of this may be related to the stenosis at LA/5. She does have significant spondylolisthesis there with quite marked ligamentum flavum hypertrophy and what appears to be significant stenosis.

[think it would be prudent to get an MRI scan and I have furnished her with a request for this particularly given her recent onset of bladder and bowel dysfunction. I will keep you updated regarding her progress end will review her once she has had the MRI scan of her lumbar spine."

48. The MRI was performed on 20 October 2017. The MRI report dated 20 October 2017 notes a history of "pain and urinary incontinence, L4/5 stenosis".

49. On 24 October 2017 Dr Coughlan reviewed Ms Larkings with the benefit of the MRI findings. Dr Coughlan provided a report to Dr Nakhla dated 17 February 2018 as follows:

"This is an update on Susanne Larkings. I have reviewed Susanne today, the 24/10/2017. She continues to have very severe back pain and leg pain.

As you will recall she injured herself and sustained a fracture of the superior end plate of L4. She has had significant ongoing back pain and leg pain. On her imaging she has developed some degree of instability at L4/5.

I have recommended she undergo an anterior lumbar interbody fusion at IA/5 augmented via posterior pedicle screws, a so called 360° fusion at that level."

50. Dr Coughlan indicated he would seek approval from the insurer for the surgery which he did by request dated 19 February 2018.

51. The insurer declined the request by letter dated 7 March 2018. The insurer referred Ms Larkings to see Dr Marchart whom she first saw on 19 March 2018 and who provided a report of 26 March 2018. The insurer reiterated their declinature based upon Dr Marchart's report.

52. Ms Larkings gave evidence about other conservative measures that she has undertaken including in the form of physiotherapy:

"32. I have been asking to see a physiotherapist for a long time and this approval was only given some time after. I have been attending Gorokan Physiotherapy Solutions since early 2017. They have provided me with a back brace which did provide me with more stability and confidence along with a walking stick, icepacks and needling."

53. Ms Larkings gave evidence that she has also had chiropractic treatment and does hydrotherapy.

54. Ms Larkings gave evidence about the deleterious impact that the injury on 23 June 2017 has had on her activities of daily living:

"33. The effect of the injuries was debilitating in that I was unable to return to work and I feared I would not regard the physical capacity to so and if that happened would not be able to return to a job that I loved nor support myself independently.

34. I live alone in a house that built 31 years ago. It is a two-story home on a 3-acre block. Prior to the accident I was able to look after myself and maintain a good standard of living., but since the accident my world has been turned upside down and I fear that I may no longer be able to live in my home.

35. I am in significant back pain which affects both kegs with referred pain and also my bowel and bladder functions. I'm very limited in my ability to perform any

strenuous activities and many everyday activities that are required to look after my self and my home, in particular I have trouble with cleaning duties, home maintenance activities including lawn and garden and also things like making beds and carrying shopping bags."

55. Ms Larkings gave evidence that her sleep is adversely affected, that it is hard to travel and she is becoming socially isolated.

56. She gave evidence that she has been unable to return to work after her injury:
"I have been unable to return to work because of this injury and my employer terminated my employment on medical grounds on 28 June 2018."

57. Professor Ghabrial was qualified on behalf of Ms Larkings as an IME. There are a series of reports from Professor Ghabrial in evidence. Professor Ghabrial considers that the proposed surgery is reasonably necessary as a result of the injury on 23 June 2017. Professor Ghabrial's opinion contained in the late report dated 4 October 2019 is consistent with the opinion of the AMS, Dr Burns, in the MAC dated 17 July 2019.

58. Dr Burns took a detailed history which is consistent with the evidence from Ms Larkings and the clinical records from her treating doctors, as follows:

"● Brief history of the incident/onset of symptoms and of subsequent related events, including treatment: Ms Larkings reported that on the 23.06.17, she was driving a small 10 or 12-seater disabled bus. The bus was designed such that the driver had to get into and out of the driver's seat not through the bus but through a door going to the outside. This required her to step down a long distance. On the day in question as she was alighting form the bus she slipped and landed heavily on her right leg. She was able to grab the door of the bus in order not to fall to the ground completely. She noted immediate pain across her low back. She reported the injury at work.

The injury occurred on a Friday and as the pain was not improving, she attended Dr Nakhla, her General Practitioner the following Tuesday. Due to the severity of the pain the doctor initially attempted to prescribe her Endone, Palexia, Valium and Panadeine Forte. She stated though that she did not commence all these medications as her pharmacist queried whether she should be on so much narcotic analgesia. As well as the medications she was referred for a CT scan of the thoracolumbar spine and pelvis, which was carried out on the 29.06.17. This revealed a compression fracture of the endplate of the L1 vertebral body.

She was subsequently referred to Dr Coughlan, a Neurosurgeon. Dr Coughlan referred her for a local bone scan, which was carried out on the 07.08.17. This revealed a crush fracture in the inferior endplate of L1 with hyperaemia indicating that it may be recent. Additionally, it was noted that she had facet joint arthropathy mostly at L4/5 and L5/S1. Some mild sacroilitis and hip joint osteoarthritis was also noted. Some bilateral femoral trochanteric bursitis was also noted. I note though that there was no evidence in the bone scan of a compression fracture at L4. Dr Coughlan recommended an L1 vertebroplasty using bone cement. This was carried out on the 05.10.17. Ms Larkings reported that she had bowel and bladder problems, which came on after the accident and pre-existed the vertebroplasty. She stated that these remained unchanged after the operation.

She subsequently reported the bladder and bowel incontinence to Dr Coughlan who referred her for an MRI scan of the lumbar spine, which was carried out on the 20.10.17. The scan revealed findings of the previous vertebroplasty, which was reported by the radiologist as a presumed atypical haemangioma. I note that he had not been informed of the vertebroplasty in the history he was given.

Additionally, it was noted that there was multilevel degenerative changes; worse at L4/5 and L5/S1. A new finding was an acute compression fracture of the superior endplate of the L4 vertebral body. This had not been noted on her previous investigations. Following the investigations Dr Coughlan diagnosed spinal instability at L4/5. In February 2018 he recommended surgery in the form of an anterior lumbar interbody fusion at L4/5 augmented by posterior pedicle screws. Ms Larkings reported that the insurance company declined liability for this operation.

Since February 2018, her ongoing treatment has consisted almost entirely of medication, physiotherapy and hydrotherapy.

- Present treatment: Ms Larkings reported that she is currently seeing Dr Oxley, her General Practitioner on a regular basis. She is not being currently seen by Dr Coughlan who is waiting for approval for her surgery. She stated that Dr Coughlan is now worried that due to the substantial delay she may have permanent neurological changes.

  With respect to medication she is currently using 25mgs Norspan patches, Baclofen 10mgs, Panadeine Forte as required, Amitriptyline and Lexapro. She is also taking Keflex (for a possible bladder infection).

  She is attending physiotherapy 3 days a week and hydrotherapy 4 days a week. She is also seeing a psychologist due to her pain problems.

- Present symptoms: Ms Larkings reported that she has pain in the midline and to the left and right of her lumbar spine, which is constant in nature. She also has muscle spasms in her low back. The pain radiates down into her right buttock and down almost as far as her right knee. She reports no pain or discomfort below the knee.

  She has noted tingling in both hands and both feet. She reported that she also has numbness in both hands and both feet, which is in the same distribution as the tingling. This includes all her fingers and toes.

  With respect to her bowel and bladder she reports incontinence, which occurs most of the time. She uses incontinence pads on a regular basis. She reported that she has had no significant investigations as to the cause of her incontinence as it was believed that this is due to her spinal canal stenosis at L4/5.

- Details of any previous or subsequent accidents, injuries or condition: She reported a history of asthma. In the past she has also had an injury involving her right shoulder.

- She also has an essential tremor, which has been present for more than 35 years. There is a family history of this condition. She is treated by Dr Schutz, a Neurologist with occasional Botox injections. With respect to her low back she reported no pain or discomfort before the current accident.

- General health: Please see above.

- Work history including previous work history if relevant: Ms Larkings reported that she had worked for many years as a Librarian. She subsequently commenced work as a Disability Support Worker with the Department of Family and Community Services. As part of her role she was required to transport disabled clients using small buses. She reported that since the injury on the 23.06.17 she has been unable to return to employment.

- Social activities/ADL: Ms Larkings reported that she is significantly disabled by her current medical condition. She reports that she currently has someone do the cooking for her and has a cleaner. She has also been provided with aides to assist her in mobilising. She has continued driving but only for short periods."

59. Dr Burns conducted a physical examination and records his findings as follows:

> "Ms Larkings was noted to walk slowly with the use of a walking aid. She was favouring her right leg. Due to her decreased mobility I believe that it was not necessary to do her height and weight.
>
> Lumbar spine: Examination of the lumbar spine revealed generalised tenderness in the lower lumbar spine with some mild muscle guarding, mostly on the right side. Active range of movement in the lumbar spine was decreased by 50% or more in all directions. It was noted on examination of both legs that she had significant dystonia present in both legs; the right worse than the left. There was markedly increase muscle tension mostly in the right leg involving both the knee and ankle. Straight leg raising was possible to 30º on both sides with an equivocal sciatic stretch test bilaterally.
>
> Neurological examination of both lower limbs revealed decreased power on both sides, which appeared to be due to pain. Reflexes in the left leg were noted to be normal but reflexes in the right leg revealed a decrease in reflex in both the right knee and right ankle. It was noted that she had a flexor plantar response on the left side but an extensor response on the right side.
>
> Sensation was reported as being equal on both sides. There was no evidence of significant decrease or increase on either side.
>
> Due to the significant lack of mobility and the use of incontinent pads it was deemed not appropriate to carry out a full spinal cord physical examination on the date of consultation."

60. Dr Burns reviewed the special investigations as follows:

> "A CT scan of the thoracolumbar and pelvis dated 29.06.17 revealed an inferior endplate compression fracture of the L1 vertebral body. At L4/5 there was significant degenerative changes with anterolisthesis at L4 on L5. This was associated with facet joint arthropathy bilaterally. It was reported that there was no significant foraminal stenosis at this level. There was though a degree of spinal canal stenosis.
>
> A bone scan dated 07.08.17 revealed an increased uptake in the lower part of the L1 vertebral body consistent with an acute crush fracture. There was moderately increased uptake in the right facet joint at L4/5 and in the left facet joint at L5/S1. This was consistent with localised degenerative changes. There was no increased uptake in the body of the L4 vertebrae.

An MRI scan of the lumbar spine dated 20.10.17 revealed Schmorl's nodes in the lower thoracic and upper lumbar spine consistent with previous Scheuermann's disease. An acute compression fracture of the superior endplate of the L4 vertebral body was noted with more than 20% loss of height. The previous L1 vertebral body fracture was now recorded as being due to a possible atypical haemangioma. I note though that this was mostly likely to be the vertebroplasty, which had been carried out 2 weeks earlier.

It was also noted on the MRI scan that there was mild to moderate canal stenosis at L4/5. There was no evidence though of foraminal narrowing or neural compromise."

61. Dr Burns summarised the injury and his diagnosis as follows:

"I note that Ms Larkings sustained a compression fracture to the inferior endplate of the L1 vertebral body, which occurred when she landed heavily getting out of a bus that she was the driver of. She reported that after the accident she developed severe pain in her back as well as some pain down into the upper part of her right leg. She also reported some bowel and bladder dysfunction. This was prior to the vertebroplasty, which was carried out in October 2017, which did not improve her symptomatology. I note that after the vertebroplasty it was noted that she now had a further compression fracture at the L4 vertebrae. After reviewing the bone scan, I believe this occurred between the date of the scan on the 07.08.17 and the date of the MRI scan on the 20.10.17. I note that in the past she was diagnosed with osteopaenia of the lumbar spine in 2011 and a further bone density test in 2018 revealed osteoporosis at L2 and L3 with ongoing osteopaenia at L4. I believe that the compression fracture was probably associated with her osteopaenia/osteoporosis and was not a direct injury from the fall in June 2017."

62. Dr Burns considered that Ms Larkings "presentation was consistent with the history obtained and the documentation reviewed".

63. Dr Burns explained his opinion as follows:

"I note that Ms Larkings's initial CT scan of the thoracolumbar spine on the 29.06.17 revealed significant degenerative change in the facet joints of L4/5; more severe on the left side. This was associated with anterolisthesis of L4 on L5 secondary to her degenerative change. Additionally, it was noted that she had an acute fracture of the inferior endplate of L1.

Her follow up CT scan on the 07.08.17 again revealed the L1 vertebral body fracture but also revealed significant degenerative change at L4/5 with significant increased uptake on the left side facet joint as well as the left facet joint at L5/S1.

Her final investigation on the 20.10.17, which now also revealed an L4 vertebral body fracture. I believe that this fracture was probably associated with her ongoing osteoporosis/osteopaenia and not directly related to her fall, which occurred some 4 months previously. I believe that the fracture to the L4 vertebral body is not directly related to her current symptoms involving her bowel and bladder and dystonia in her legs. This MRI scan also revealed moderate spinal canal stenosis at L4/5.

Taking account of all the above information I believe that the initial fall on the 23.06.17 led to a fracture of the L1 vertebral body but also aggravated and accelerated the degenerative change at L4/5. Following the fall, she developed bowel and bladder problems even before the vertebroplasty was carried out.

In conclusion I believe that the fall on the 23.06.17 aggravated the pre-existing degenerative change at L4/5 as well as the instability at that level and was at least partially the cause of the development of her spinal cord compressive symptoms. Certainly, the pre-existing degenerative change and spondylolisthesis at L4/5 may have predisposed to the development of the spinal cord symptoms but certainly the aggravation from the fall would be an accelerating factor and cause."

64. Dr Burns made brief comment on the other medical opinion that was before him as follows:

> "I note the Independent Medical Examination reports of Dr Frank Machart dated 23.04.18 and the 06.05.19. Dr Machart believes that the proposed surgery at L4/5 was not from the injury caused on the 23.06.17 but was due to the degenerative spondylosis. In his supplementary report he also states that he believes that as there was no direct fall onto the back in the initial accident and that L4/5 could not be seen as being injured. Whilst I agree with Dr Machart that there was no direct injury to the back by falling on the injury date, I note that she did fall a significant distance onto her right leg when getting out of the bus and also grabbed onto the door and twisted her low back. I believe there is the distinct possibility of aggravation of pre-existing L4/5 degenerative change and spondylolisthesis. This would certainly be a causative factor of the increase in spinal canal stenosis at that level and her subsequent bowel and bladder dysfunction.
>
> …
>
> I note the multiple medicolegal reports of Professor Ghabrial dated 30.05.18, 18.09.18, 26.11.18 and the 29.01.19. Professor Ghabrial believes that the need for surgery at L4/5 was directly related to the injury, which occurred on the 23.06.17. Whilst I agree with his findings, I did not believe that his reasoning was well laid out in his medical reports.
>
> I note the multiple medical reports of Dr Coughlan, treating Neurosurgeon.
> Dr Coughlan believes that the spinal cord stenosis and instability at L4/5 has been contributed to by the fall on the 23.06.17. Considering the nature of the fall and the fact that she developed bowel and bladder dysfunction after the fall I believe that this is correct."

65. Dr Burns answered the specific question that was referred to him as follows:

> *"Is the surgery proposed in the form of lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws reasonably necessary as a result of injury on the 23.06.17?*
>
> I believe that the fall, which occurred on the 23.06.17 caused not only a compression fracture of the L1 vertebral body but also more probably than not aggravated her pre-existing degenerative change and instability at L4/5. As such it had accelerated the development of her spinal cord stenosis at that level and has directly led to her spinal cord compressive symptoms. I therefore believe that the surgery proposed in the form of a lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws is reasonably necessary due to the injury on the 23.06.17."

66. As I have stated, the opinion of the AMS is non-binding upon me and is evidence that must be weighed in the balance with all of the other evidence that is before me.

67. The Department relies on the opinions of Dr Machart, the IME qualified on their behalf.

68. Dr Marchart has provided opinion in reports dated 28 March 2018, 23 April 2018, 13 May 2019 and 12 August 2019.

69. Dr Marchart first saw Ms Larkings on 19 March 2018 and provided a report dated 28 March 2018.

70. Dr Marchart took a history of injury on 23 June 2017 as follows:

> "The description was that she was driving a coaster bus. The driver was protected by a 'cage'. This made it necessary to exit the bus through the driver's door. On this occasion, as per usual, she exited the bus through the driver's door. She landed awkwardly on the right leg. She tried to protect herself from falling and garbed onto they door of the bus. She did not fall. She experienced a sudden onset of pain in the lower back. She worked another shift. She was unable to continued."

71. Dr Marchart took a treatment history, consistent with the other evidence before me as follows:

> "Within a few days, she sought medical attention from her GP. She had x-rays about a week later. She was treated by analgesic. The x-ray apparently demonstrated a fracture of L1. She was referred to Dr marc Coughlan. She developed partial bladder and bowel dysfunction. Loose stools and episodes of incontinence. Dr Coughlan conducted vertebroplasty, which she described as 'cement injection' into the L1 vertebral body. There was no significant improvement after this procedure. She continued to suffer upper lumbar pain, stiffness, instability and bowel and bladder problems. She saw Dr Coughlan again. The doctor organised further scans, diagnosed fracture of L4, suggested stenosis at L3/4 and put in a proposal for global front and back l4/5 fusion, Ms Larkings was keen to proceed."

72. Dr Marchart noted that Ms Larkings has not worked since the time of injury except for one shift.

73. Dr Marchart noted the use of a walking stick and now a walking frame because of instability on her feet.

74. Dr Machart conducted a physical examination and recorded his findings as follows:

> "General:
> Frail, elderly lady. She walked slowly and used a walking frame.
>
> Lumbar spine:
> There was no spasm and no deformity. Tenderness upper lumbar segments, minimum movement, restricted in all directions. Reflexes knees and ankles intact. Reflexes in the lower limbs were present and symmetrical, knees and ankles. Sensory loss in lower limbs was not evidence. Plantar reflexes were down going, Saddle shaped anaesthetisia was not evident."

75. Dr Marchart reviewed the special investigations recording as follows:

> "20/10/2017 post vertebroplasty. MRI of the lumbar spine demonstrated fracture L1, fracture L4 and degenerative spondylosis and stenosis at L4/5.
> Bone scan 7/08/2017 crush fracture L1."

76. Dr Marchart reviewed the other medical opinion that was before him including the reports of the treating specialist Dr Coughlan. Dr Marchart made the following comment:

"Vertebroplasty at L1 fracture. More pathology than L1 fracture was not evident prior to vertebroplasty. Dr Coughlan added additional features, L4/5 spondlyothesis, degenerative type due to ligamentum flavum hypertrophy and L4 vertebral fracture into the diagnosis tic scenario after the vertebroplasty. The doctor is concerned about bladder and bowel issues. It is not clear how the doctored relates all these issues to the

injury when symptoms and clinical signs postdate the injury. He did not comment on such pathology prior to the vertebroplasty at L1. The timelines do not dictate that the treatment for which he is seeking approval is related to the injury. This is unlikely as I have outlined under paragraph 'opinion' below."

77. Dr Machart goes onto the opine as follows:

"Opinion

Diagnosis

Mrs larking's is suffering from osteoporosis. She suffered an insufficiency fracture at L1 at the time of the injury on 23 June 2017. This is not a case of high velocity trauma. Given that the bones are osteoporotic, the fracture then occurs through the osteoporosis bone.
The fracture at l4 and the L4/5 spondylosis were not related to the injury on 23/06/2017. The fracture at L4 is a new entity, which was not evident on 07/08/2017 and was evident on investigation on 20/10/2017. This is a consequence of osteoporosis. The L4/5 symptoms for which treatment is sought are a product of degenerative spondylosis.

I am not of the opinion that multifactorial trauma occurred at the time of injury. There was a fractured L1. The injury was a twist or sprain which was diagnosed as having caused L1 insufficiency fracture. It would be difficult to add substantial pathology in other areas, L3/4 and L4/5 to this incident alone.

Vertebroplasty is a useful procedure, sometimes it does not cause a great deal of improvement.

Bowel and balder problems developed a couple of months after injury. It is not clear what the source if these symptoms are. It is not clear whether this is neurological or whether other causes were excluded. She may need to see a neurologist.

The proposed operation by Dr Coughlan address the pre-existing spondylosis and not pathology caused by the injury."

78. Dr Marchart did note that she had no prior injuries and tried to keep herself active.

79. Dr Marchart noted that Ms Larkings was considerably disabled and was unfit for work.

80. Dr Marchart considered that the proposed operative treatment was indicated "but not for the purposes of treating the injury".

81. Dr Marchart provided a supplementary report dated 23 April 2018 at the request of the insurer where he was asked to clarify his opinion. He answered as follows:

"I refer to my IME dated 28/03/2018. This related to injury on 23/06/2017.
Ms Larkings' was diagnosed as suffering L1 vertebral body fracture. There were degenerative changes to the lower lumbar spine.

I formulated the opinion that multi-level trauma was not consistent with the description of injury, I accepted the pathology related to the injury as fracture of L1. It was difficult for me to substantiate additional and concurrent injury to two levels, l3/4 and l4.5. my assessment was that the proposed surgery at L4/5was not for the injury but rather for degenerative spondylosis.

I noted that Ms Larkings has not worked since the time of the injury. She was not working at the time that I saw her.

The l1 vertebral facile remains the painful focus. This is causing dyability.

I assessed there is partial disability in relation to the fracture. She is not fit for preinjury ditties, that public transport or community driver. She is fit for sedentary and nonphysical type work, suitable duties include office work, meeting and greeting sales or similar. She should not be lifting anything heavier than 5 kg.

There is pathology in the lower lumbar spine for which surgical treatment is sought. The additional symptoms do not relate to the injury and are the source of additional disability."

82. Dr Marchart provided a further report dated 13 May 2019. He did not review Ms Larkings for the purpose of this report. He is asked to comment on the other medical opinion that supports Ms Larkings' case. Dr Marchart wrote:

"Thank you for your recent correspondence. I shall answer your enquiry using documentation that you put before me, and details outlined in my IME report dated 28/03/2018 and supplementary reported dated 23/04/2018.

My assessments related to injury on 23/06/2017. Mrs Larkings was diagnosed as having suffered an L1 vertebral body fracture. I noted degenerative changes in the lumbar spine. The injury was not a fall. It was an awkward stumble. I assessed that multifactorial pathology, evident radiologically, was not consistent with the description of injury. Several levels of the lumbar spine were not injured concurrently. There was proposal for surgery at L4/L5 which I assessed was due to degenerative changes rather than for impact of injury. The Ll vertebral body fracture remains the painful focus causing disability. This was related to the injury, and not to the degenerative changes in the lower lumbar spine.

Post-injury care was vertebroplasty at L1, conducted by Dr Coughlan. There was no significant improvement. Further scans demonstrated fracture at L4 and stenosis at L3/L4. There was proposal for global front and back L4/L5 fusion.

The pathology of injury was L1 vertebral body fracture treated by vertebroplasty. noted that Dr Coughlan diagnosed stenosis at L4/L5 4 months after the injury and that additional pathology, fracture of endplate at L4 and instability at L4/L5, was diagnosed

in February 2018, that is, several months after the incident. The doctor was of the opinion that all the pathology was related to the initial incident.

> My assessment was that pathology, other than L1 vertebral body fracture, was not evident prior to the vertebroplasty. Additional pathological features which were degenerative L4/L5 spondylolisthesis, stenosis at L4/L5, and L4 vertebral body fracture came into the diagnostic scenario after the vertebroplasty. Bladder and bowel dysfunction were diagnosed well after the injury. Timelines are suggestive of Ll vertebral body fracture caused by the incident, and additional pathology diagnosed well after the incident without evidence that the pathology at the additional levels related to the injury. The clinical feature is degenerative pathology."

83. I note that Dr Marchart refers to Dr Coughlan diagnosing additional pathology in February 2018. In fact, it was diagnosed in October 2017 after the vertebroplasty undertaken on 5 October 2017 did not provide any relief for Ms Larking's who was continuing to report persistent symptoms of significant pain that had their onset on the date of injury and had progressed.

84. When weighing Dr Marchart's opinion of 13 May 2019 in the balance I note that he identifies degenerative pathology at the L4/5 level but does not take into any account or explore in any way that the injury may have caused an aggravation of the degenerative changes.

85. Despite Ms Larking's' report to Dr Machart of the onset and persistence and progression of symptoms (severe back pain, radiating to right leg, onset of bowel and balder disturbance) and all of which is consistent with her contemporaneous reports to those treating her, Dr Machart does explore at all any probability that the injury has aggravated the degenerative changes at L4/5. Dr Machart simply identifies the L4/5 as degenerative pathology.

86. In Dr Burns' view the injury on 23 June 2017

> "aggravated the pre-existing degenerative change at L4/5 as well as the instability at that level and was at least partially the cause of the development of her spinal cord compressive symptoms. Certainly, the pre-existing degenerative change and spondylolisthesis at L4/5 may have predisposed to the development of the spinal cord symptoms but certainly the aggravation from the fall would be an accelerating factor and cause."

87. Dr Marchart addresses the opinion of the AMS because he Dr Machart provides a further report at the request of the department's lawyers dated 12 August 2019. This was a report obtained by the department in response to the MAC of Dr Burns.

88. Dr Marchart answered a series of questions which included the following:

> "The AMS concluded that the pathology for the lumbar spine for which surgical treatment is sought was as a result of the injury on 23 June 2017.
>
> Are you still of the view that the L4/5 pathology was not as a result of the workplace injury and is due to pre-existing pathology. Please provide the rationale for your view.
>
> To answer this, the chronology of pathology is important:
>
> 1) Low velocity injury 23/6/17
> 2) Fracture L1 diagnosed and attributed to this event
> 3) bone can negative, did not diagnose fracture L4 pathology or elsewhere
> 4) bowel and bladder symptoms after injury, not immediately after

5) feature l4 diagnosed few months later. This fracture was not caused by the injury
6) fracture L4 caused oedema and contributed to existing stenosis at L4/5
7) stenosis at l4.5 was not caused by the injury
8) stenosis was not morphologically changed by the index injury
9) treatment for stenosis at l4/5 is not related to the index injury.

The pathology for which treatment is sought is spinal canal stenosis, this was a long-term pre-existing condition, which gradually became worse after the injury. Given the description of injury and the pathology at the L4/5 level, arthritic joints, not likely to be mobilised by the forces generated by the injury, then I did not believe that there was structural injury at this joint, to the point now requiring survival intervention.

In my surgical practice I operated on may spines for stenosis. Spinal surgeons see the hypertrophic facet joint and the stiffness and firmness of these joint. These joints are very solid, surrounded by hard hyperthick bone which makes decompression difficult. Having been inside similar spines, as a surgeon I would have to conclude that the injury described could not have caused structural alteration or instability, the latter mentioned as the need for surgical stabilisation.

The caudal equine symptoms may need urgent surgical attention. Such surgical attention is given priority in our pubic hospitals. Such urgent surgery cuts across waiting lists."

89. I note that Dr Marchart has conceded that the pre-existing condition at L4/5 gradually became worse after injury. This statement is consistent with Ms Larking's' consistent presentation to the professionals treating her after injury.

90. I have to weigh all of the evidence in the balance in this case.

91. DR Marchart has remained of the view throughout his various reports that the impact was a benign one not sufficient to cause multilevel trauma. Despite his view that it was low velocity trauma, he accepts that the impact was sufficient to cause an L1 fracture in Ms Larkings' spine.

92. I note that Dr Marchart has conceded that the pre-existing condition at L4/5 gradually became worse after injury. This statement is consistent with Ms Larking's' consistent presentation to the professionals treating her after injury.

93. Dr Marchart is of the view that the timeframe for the onset of the bowel and bladder symptoms was too far from the date of injury to be related to the injury. However when I weigh all of the evidence, I prefer the evidence of Ms Larkings, unchallenged by cross-examination, about the mechanism of injury – the manner in which she was forced to exit from the bus by effectively freefalling to the ground, that on 23 June 2017 her leg gave way and she had heavy impact with the ground. She experienced immediate severe pain in her back. This is consistent with the clinical records of her general practitioner and what her general practitioner advised the insurer in the "early intervention fax" on 4 July 2017. She was referred, because of the severity of her symptoms, to neurosurgeon Dr Coughlan. There was a delay before she could get an appointment. Her symptoms persisted and progressed from the time of injury. Prior to the injury she was not troubled by back pain except on an episodic basis. She was able to work without restriction until the time of her injury. She has not been able to work since injury (with the exception of the shift she attempted on the day after injury). At all times she has given a consistent history of severe pain after injury that has persisted and has progressed to right leg pain as well as bowel and bladder symptoms, the onset of which I am satisfied was after injury and before the vertebroplasty was carried out.

94. I have to weigh all of the evidence in the balance. I note the consistency of Ms Larkings evidence about the onset of symptoms from the date of injury on 23 June 2017 and the persistence and progression of those symptoms. Her evidence was unchallenged by cross-examination and is consistent with the records of those treating her. When I weigh all of the evidence in the balance, I prefer the opinion of the AMS, which is consistent with that of Dr Coughlan and Professor Ghabrial, that the injury caused an aggravation of disease at the

L4/5 level and that the proposed surgery is reasonably necessary as a result of the injury on 23 June 2017. I am satisfied on the balance of probabilities that the injury on 23 June 2017 consisted in the aggravation, acceleration, exacerbation or deterioration of the degenerative disease at L4/5 to which the employment was the main contributing factor to the aggravation, acceleration , exacerbation or deterioration and that the surgery proposed by Dr Coughlan is reasonably necessary as a result of the injury. Accordingly, I will make an award for the applicant in respect of the surgery proposed in the form of lumbar interbody fusion at L4/5 augmented by a posterior pedicle screws.