WORKERS COMPENSATION COMMISSION

CERTIFICATE OF DETERMINATION

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

Matter Number: **1753/20**
Applicant: **ROBERTO MAYUGA**
Respondent: **ALLIED EXPRESS TRANSPORT PTY LTD**
Date of Determination: **3 June 2020**
Citation: **[2020] NSWWCC 185**

The Commission determines:

1. Respondent to pay the applicant's section 60 expenses in respect of treatment proposed by Dr Omprakash Damodaran, namely, an anterior interbody fusion at L5/S1 and associated expenses as a result of the injury on 13 September 2018.

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

Carolyn Rimmer
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 CAROLYN RIMMER, ARBITRATOR, WORKERS COMPENSATION COMMISSION.

A Sufian

Abu Sufian
Senior Dispute Services Officer
As delegate of the Registrar

STATEMENT OF REASONS

BACKGROUND

1. The applicant, Roberto Mayuga (Mr Mayuga), was employed by the respondent, Allied Express Transport Pty Ltd (the respondent) as a courier. The respondent's workers compensation insurer at the relevant time was Employers Mutual Limited (the insurer).

2. In the course of his employment on 13 September 2018, Mr Mayuga was attempting to secure a pallet load while standing on the back of a truck. He was holding onto the plastic wrapping, which slipped, causing Mr Mayuga to lose control and fall, hitting the ground and fracturing his sacral (S) 3 vertebra, hitting his head on the concrete and losing consciousness.

3. Mr Mayuga made a claim for medical treatment in relation to an anterior interbody fusion at L5/S1 and associated expenses proposed by Dr Omprakash Damodaran.

4. The respondent disputed liability in respect of the claim for surgery in a section 78 notice dated 6 September 2019.

ISSUES FOR DETERMINATION

5. The parties agreed that the following issue remained in dispute:

    (a) Whether surgery proposed by Dr Damodaran was reasonably necessary as a result of the injury on 13 September 2018.

PROCEDURE BEFORE THE COMMISSION

6. The parties attended a conciliation conference and arbitration on 25 May 2020. Mr Mayuga was represented by Mr T Grimes, who was instructed by Premier Compensation Lawyers. The respondent was represented by Mr D Adhikary, who was instructed by Mr Elder of Bartier Perry Lawyers.

7. I am satisfied that the parties to the dispute understood the nature of the application and the legal implications of any assertions 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:

    (a) Application to Resolve a Dispute and attached documents;

    (b) Reply and attached documents;

    (c) Supplementary statement of Mr Mayuga dated 22 May 2020 and attached documents, and

    (d) the Application to Admit Documents dated 19 May 2020 and attached documents.

9. The respondent made an application to cross-examine Mr Mayuga in relation to whether he had been provided with a copy of the report of Dr Truskett dated 30 April 2020 and whether he had discussed the contents of that report with his treating doctors. Mr Grimes opposed the application to cross-examine the applicant. I note that the report from Dr Truskett was attached to the Application to Admit Late Documents dated 19 May 2020. I dealt with the application on an ex tempore basis and refused leave to cross-examine the applicant. I noted that the respondent had not given the applicant notice of this request before the arbitration on 25 May 2020 and the report of Dr Truskett had only been served on the applicant on 19 May 2020. I was not persuaded that the questions that the respondent sought to put to the applicant concerning whether he had seen the report of Dr Truskett and discussed its contents with his treating doctors were really relevant to the matters to be determined in this case. I should add that I regard it as unrealistic and unreasonable to expect that Mr Mayuga would have had an opportunity to discuss the opinions expressed in Dr Truskett's report with his treating doctors in the six day period between service of the report on his solicitors and the arbitration.

SUBMISSIONS

10. The submissions of the parties are recorded and I do not propose to repeat each of the arguments of counsel in these reasons. However, the respondent submitted that the proposed treatment was not reasonably necessary as a result of the injury on 13 September 2018 and was likely to fail. Further, the respondent argued that the treatment was not appropriate treatment because of the risks involved for Mr Mayuga, who had a number of significant co-morbidities.

11. The applicant submitted that the weight of the medical evidence supported a finding that the proposed surgery was reasonably necessary as a result of the injury on 13 September 2018. The applicant also argued that the risks had been addressed by the treating doctors and treatment should not be foregone merely because a worker had a greater risk factor.

FINDINGS AND REASONS

Evidence of Mr Mayuga

12. In a statement dated 4 December 2019, Mr Mayuga stated that he was employed by the respondent as a courier driver. He said that he had a history of illnesses including hepatitis B, chronic renal failure with ongoing home hemo-dialysis, type 2 diabetes and hypertension.

13. He stated that at the time of the accident he was working about 60 hours a week over six days. He said that on 13 September 2018 he was unloading goods off the back of a truck. He wrote:

> "The pallet was wrapped in plastic however, as this was poorly done it came loose and this caused the load to shift. I attempted to try and mitigate the load falling, however I fell from the back of the truck and landed on the concrete, sustaining a fracture to my spine and loss of consciousness as I hit my head."

14. Mr Mayuga said that initially he did not feel overwhelming pain and he continued to work for about three weeks. He said that he felt compelled to continue working out of financial necessity. He stated that he hoped his injuries would just get better on their own. He said that he then sought treatment as the pain did not go away and once he discovered he had a fractured spine he advised the respondent that he could no longer work.

15. Mr Mayuga stated that as a result of the accident he suffered injuries to his back and developed significant and ongoing pain problems. He said that he would often wake up due to pain and he had trouble sleeping. He said that the pain would shoot into his legs and he also had pins and needles and numbness in his feet and toes. He said that he constantly required the use of painkillers including Lyrica.

16. In a supplementary statement dated 22 May 2020 Mr Mayuga said that he had attended Dr Mark Rosso for treatment. The applicant stated that he underwent the steroid injection, namely, a diagnostic medial branch block to the lumbar facet joint, as suggested by Dr Standen, in order to determine whether or not facet joint arthropathy was contributing to nociceptive lumbar pain, about three weeks ago. Mr Mayuga said that he had not received relief from this treatment and the pain had returned after the treatment. Mr Mayuga said that he faced significant delays in obtaining the steroid injection due to COVID-19 restrictions on elective treatment and surgery and subsequent scheduling issues.

17. Mr Mayuga stated that he was unaware of the radiofrequency pulse treatment for the back and leg pain that had been suggested by Dr Russo and noted that Dr Russo had indicated to him that the most effective treatment pathway was to undergo the proposed fusion surgery, and this would be the way to most effectively minimise his pain.

18. Mr Mayuga stated that any previous conservative management administered to him had wholly failed and the pain had returned. He said he did not wish to undergo further conservative procedures and treatments that historically had not provided him relief and had required him to undergo rehabilitation and recovery periods. Mr Mayuga said that to undergo further treatments would delay the inevitable surgery that he needs.

19. Mr Mayuga said that Dr Russo expressed the view that the pharmaceutical relief given to him was not wholly effective due to the use of dialysis and it was not a viable option to continue increasing or adding pain medications to manage pain as merely a mask and not a cure. Mr Mayuga requested that the treatment proposed be approved.

Medical Reports

Medico-Legal Reports

20. In a report dated 16 August 2019, Dr Vidyasagar Casikar, consultant neurosurgeon, noted that he had examined Mr Mayuga on 7 August 2019. Dr Casikar stated that following the accident on 13 September 2018 Mr Mayuga continued to work but his pain increased and after about three weeks he could not manage to do any further work. In December 2018 Mr Mayuga consulted Dr Damodaran, neurosurgeon, who advised him to continue with physiotherapy. Dr Casikar noted that on 22 March 2019 Mr Mayuga had a discectomy and made good progress for two weeks but the problems recurred when medications were reduced. Dr Casikar noted that Mr Mayuga continued to have physiotherapy and hydrotherapy and started taking Targin on the advice of his physician to relieve his pain. He noted that Targin had side effects and he had to reduce the dose. Dr Casikar noted that Mr Mayuga had again consulted Dr Damodaran, who indicated that he required a spinal fusion.

21. Under "Past Medical History" Dr Casikar noted that Mr Mayuga had renal failure in February 2017 and was placed on regular dialysis, had developed lung cancer in 2018 and had a right lobectomy, and had been a diabetic for more than 15 years. On examination Dr Casikar noted that Mr Mayuga was unable to walk on heels and toes and neurological examination of the lower limbs suggested glove/stocking type of hypoesthesia in both upper and lower limbs. He noted that the SLR was ranging between 40-50 degrees, and all deep tendon reflexes were absent.

22. Dr Casikar made a diagnosis of diabetic neuropathy, renal failure and bronchogenic carcinoma.

23. Dr Casikar noted that the sacral fracture at S3 had healed. He made a diagnosis of degenerative disease of the lumbar spine which he considered was related to longstanding diabetes. He expressed the view that the indications for a microdiscectomy by Dr Damodaran were very difficult to justify and the probabilities were that his symptoms were not related to the alleged L4/L5 aggravation. Dr Casikar considered that Mr Mayuga had a long history of diabetic neuropathy and the pins and needles were probably related to that neuropathy. Dr Casikar wrote:

> "Merely because Mr Mayuga complains of back pain a fusion is not the appropriate answer. Considering the fact that he has major issues a spinal fusion is likely to fail, and it is not likely to make any difference to his condition. Mr Mayuga is not able to get back to his work because of his various medical problems. A spinal fusion will add a further burden to his pre-existing problems."

24. Dr Casikar noted that Mr Mayuga was told by Dr Damodaran that the nephrologist and vascular surgeon were happy to proceed with a spinal fusion. Dr Casikar stated that while it might be technically possible "with the modern-day medicine" to perform these procedures, the outcome of a spinal fusion was expected to be poor and it was unlikely to get Mr Mayuga back to any kind of employment. He wrote: "His neurological symptoms are predominantly due to diabetic neuropathy."

25. Dr Casikar considered that non-surgical management of his problem would have a better outcome. He considered that the microdiscectomy failed to relieve his symptoms because the problem was not at L4/L5 segment and the problem was because of his diabetic neuropathy. He stated that a spinal fusion would also similarly fail.

26. Dr Casikar wrote:

> "The main barriers to the proposed surgery are the failure of the previous surgery, diabetic neuropathy, renal failure and bronchogenic carcinoma. In my opinion, Mr Mayuga's symptoms are not related to any neurological aggravation at L4/5 segment following the sacral fracture. This in my opinion is a major barrier and there is no evidence of nerve root compression. Surgery is likely to fail. The microdiscectomy has failed. Further surgery would also fail."

27. Dr Casikar wrote:

> "I am not sure if this kind of surgery is necessary considering his various co-morbidities. Microdiscectomy has failed for the reasons I have explained above. A spinal fusion will also fail to improve his symptoms …"

28. In a report dated 5 February 2020, Dr Jane Standen, consultant pain medicine physician and anaesthetist, noted that she had examined Mr Mayuga on 30 January 2020. She said that he presented with persistent lumbar pain and lower limb neuropathic pain in relation to a work-related injury occurring in September 2018.

29. Dr Standen wrote:

> "Mr Mayuga was subsequently referred to neurosurgeon Dr Damodaran, who organised an L5 perineural injection which offered some relief for several weeks. Additionally he was seen by a number of allied health professionals including a physiotherapist, undertook hydrotherapy and also attended a chiropractor. With no significant improvement and a provisional diagnosis of compression of the bilateral L5 nerve roots, he underwent an L5/S1 microdiscectomy on 22 March 2019. Mr Mayuga indicated that there was improvement in pain for approximately 2 weeks. With return of symptoms in an L5 distribution it was suggested Mr Mayuga proceed to anterior lumbar interbody fusion (ALIF) of L5/S1 segment under Dr Damodaran's care. This was declined by the insurer."

30. Dr Standen noted that Mr Mayuga was subsequently referred to Dr Mark Russo, who suggested a number of interventions in an effort to reduce his current reliance on all analgesics. She noted that Mr Mayuga had trialled a number of opioid analgesics including Targin, Panadeine Forte, MS Contin, and was currently prescribed Jurnista 8mg at night, as suggested by his renal physician. She noted that additionally he continued to manage neuropathic pain with Lyrica 75mg at night which was associated with significant cognitive dysfunction and gait imbalance. She reported that Dr Russo commenced Cymbalta 60mg for the peripheral neuropathic pain and optimisation of mood.

31. Dr Standen noted that Mr Mayuga described pain originating in the bilateral buttock region radiating over the lateral aspect of both legs, left side greater than the right at present, and extending as far as his feet. She noted that pain was problematic both day and night. She reported that pain associated disability was significant with pain impacting on sleep, mood and ability to return to work. She said that Mr Mayuga described shooting and electric shock type pain waking him frequently at night time.

32. Dr Standen noted that Mr Mayuga had a significant number of comorbidities including type 2 diabetes, renal failure progressing to haemodialysis in 2017, previous compound fracture of the tibia which required multiple operations, pre-existing history of right sided sciatica since early 2000 managed with the intermittent use of Panadeine Forte, a history of tuberculosis and a right lung lobectomy for cancer.

33. On examination, Dr Standen noted that there was tenderness over the bilateral facet joint region to palpation. She reported that on examination of the lower limbs, all muscle groups were significantly atrophied. She reported that with sensory examination there was altered sensation from the knees distally to the toes, hypoalgesia to toothpick and to light brush in a stocking distribution, absent vibration to the knee, and no distal reflexes were able to be elicited.

34. Dr Standen noted that a report from Dr Anna Schutz, consultant neurologist, stated that nerve conduction studies had been performed demonstrating distal axonal peripheral neuropathy. She noted there was a pre-operative MRI, which reported a significant narrowing of the L5/S1 disc space and narrowing of the lateral recesses, right side greater than the left, with impingement on the right S1 nerve root and mild impingement on the existing L5 nerve roots.

35. Dr Standen expressed the view that there was persistent pain and significant pain associated disabilities. She stated that contributors to the current pain presentation included:

> “(a) Nociceptive lumbar pain in relation to prior work-related injury and subsequent spinal surgery. There is both a myofascial component to this as well as a probable facetogenic component to this pain. This is secondary to alteration in biomechanical loading of the facet joints adjacent to the previous microdiscectomy.
>
> (b) Lower limb neuropathic pain of which contributors are twofold. These include a distal peripheral neuropathy probably secondary to type 2 diabetes. Additionally, pain description is consistent with a bilateral lower limb radiculopathy in an L5 distribution secondary to L5 nerve root compression. The probability of this is increased by clinical examination consistent with reduced power in a bilateral L5 myotomal distribution.
>
> (c) Secondary musculo-skeletal changes and pain possibly in association with bilateral piriformis syndrome. This was less apparent in consultation today than the above contributing factors.”

36. Dr Standen stated that non-work related factors contributing to the current presentation included a distal peripheral neuropathy probably secondary to type 2 diabetes which was not work-related and contributed to below knee lower limb neuropathic pain.

37. Dr Standen was asked to comment on lumbar facet joint radiofrequency neurotomy at L4/5 and L5/S1 in conjunction with piriformis injection as recommended by Dr Russo and also a bilateral L5 dorsal root ganglion pulsed radiofrequency neurotomy. Dr Standen commented that all procedures suggested by Dr Russo had evidence in clinical practice and normal clinical practice was to undertake diagnostic medial branch blocks of the lumbar facet joints in question prior to radiofrequency neurotomies. She wrote:

> "If Mr Mayuga has entrapment of the bilateral L5 nerve roots, pulsed radiofrequency neurotomies of the nerve roots are unlikely to provide significant clinical benefit in the absence of recommended spinal surgery.
>
> Radiofrequency neurotomies of the lumbar facet joints could certainly assist with nociceptive lumbar pain secondary to facetogenic contributors."

38. Dr Standen noted that Mr Mayuga was prepared to undertake targeted pain interventions in the absence of approval for ALIF. She noted that it was spinal surgery that he hoped to undertake in terms of providing a significant improvement in clinical symptoms. She reported that he was describing significant side effects associated with medications which he was currently prescribed. Dr Standen commented that oral analgesics were appropriate and doses were contained, but there was little room to move in that area, and she would not like to see any escalation of opioid analgesics as tolerance and dependency on this class of medication would escalate swiftly. She noted that Lyrica was associated with significant cognitive side effects and gait disturbance, which was worrying. Dr Standen also commented that alternative appropriate interventional measures in the absence of spinal surgery included trialling a spinal cord stimulator.

39. In a report dated 30 April 2020, Dr Phil Truskett, consultant surgeon, noted he had conducted a file review but had not interviewed or examined Mr Mayuga. He stated his opinion had been generated by perusal of documentation provided.

40. Dr Truskett noted that Mr Mayuga had physiotherapy, attended a chiropractor following his injury on 13 September 2018 and was also referred to Dr Damodaran. He noted that Mr Mayuga had a past medical history of type 2 diabetes, asthma/chronic obstructive pulmonary disease, hepatitis B, chronic renal failure on haemodialysis and hypertension. He noted that Mr Mayuga had also adenocarcinoma of the lung which was resected on 16 December 2017. Dr Truskett reported that Mr Mayuga was on a large number of medications.

41. Dr Truskett noted that on 22 March 2019, Dr Damodaran performed an L4/5 and L5/S1 laminectomy discectomy and decompression of both the L5 and S1 nerve roots. He noted that there was a good response to leg pain when reviewed on 6 April 2019 but, unfortunately, the pain recurred and on 29 June 2019 Dr Damodaran recommended Mr Mayuga undergo an anterior lumbar interbody fusion. Mr Mayuga was referred to Dr David Robinson, vascular surgeon, in order to perform an anterior approach as a vascular surgeon was required to mobilise the aorta to provide approach for the fixation device.

42. Dr Truskett noted that Dr Anna Schutz had performed nerve conduction studies which demonstrated moderately severe diabetic neuropathy and she was also of the view that Mr Mayuga had radicular pain that would not be accounted for by his diabetes. Dr Truskett noted Mr Mayuga underwent a CT guided injection in the L4 nerve root on 3 December 2018 with no benefit.

43. Dr Truskett referred to the report of Dr Standen dated 5 February 2020 and noted that she was of the view that the lower limb pain was twofold, caused by distal peripheral neuropathy, probably secondary to Type 2 diabetes, and by radiculopathy due to L5 nerve root compression bilaterally.

44. Dr Truskett noted that Dr Casikar expressed the view that there was no clinical indication for a spinal fusion on a subject *"who has such a major medical problem"*.

45. Dr Truskett commented that Mr Mayuga had significant comorbidities that may impact on health risks associated with anaesthesia and spinal fusion. He noted that in relation to the success of the spinal fusion, there was a risk that surgery may not resolve his pain, and that this had been discussed by others.

46. In terms of the impact of comorbidities, Dr Truskett referred to the American College of Surgeons National Surgical Quality Improvement Program calculator (NSQIP) and said that the calculator had been developed with the input of data of many thousands of patients into a database, so that the potential risks of particular operations could be calculated. He attached the calculator results for the procedure described as an anterior interbody technique and outlined Mr Mayuga's individual risks in the table provided. Dr Truskett said that he added a risk of somewhat higher than estimated because Mr Mayuga had chronic airways disease and asthma and had a history of pneumonia, which he believed would place him at higher risk than average. Dr Truskett said the chart demonstrated Mr Mayuga has significant risk for this procedure compared to the average patient and his risk of death was 2.4% as compared to the average of 0.1%. He wrote: "Although these figures are the result of an American population, it is my view that the risks would be similar."

47. Dr Truskett noted he had been asked to assess the likelihood of the benefits from surgery, but said he was unable to answer this question as he had not examined Mr Mayuga and he would defer to a neurosurgical or spinal surgeon opinion in that regard. He stated that he had outlined the risks of the procedure and the decision of it to be reasonable and necessary would require a discussion with Mr Mayuga's neurosurgeon in that regard.

Reports from treating doctors

48. In a discharge referral dated 12 October 2018 from Gosford Hospital, Dr Reid made a diagnosis of back pain and noted that Mr Mayuga had presented at ED requesting a CT of his L/S spine due to symptoms developing following a fall at work off a truck about four weeks ago. He noted that Mr Mayuga had developed worsening bilateral sciatic pain from the lateral gluteal region radiating down the back of both legs to the soles of the feet.

49. In a report dated 29 October 2018, Dr Marsh made a diagnosis of a fracture at S3 of the sacrum, neuropathic pain in the lower limbs, and exacerbation of degenerative lumbar disease. She noted that the underlying lumbar disc protrusions at several levels and osteophytes had caused him to develop referred pain. She noted he was seeing a chiropractor and being prescribed analgesics. She considered that he might require an MRI and specialist review.

50. In a report dated 5 November 2018, Dr Paul Roach, respiratory and sleep physician, reported that he had reviewed Mr Mayuga and noted that a few weeks ago he had fallen off his truck at work, landing on his coccyx. He noted he had sustained a fracture of the S3 vertebral body and a recent CT scan of the lumbar spine showed significant nerve root compression including L3, L4 and L5 nerve roots, worse on the left than on the right. Dr Roach noted that Mr Mayuga was in significant pain and struggled to get to the clinic. Dr Roach noted that on examination there was tenderness over the lumbosacral spine. Dr Roach stated that from the respiratory perspective Mr Mayuga was stable and he had no symptoms of chronic bronchitis. He recommended that he remain on Spiriva and Fluiform. He noted he had successfully completed treatment for tuberculosis.

51. In a report of an MRI dated 6 November 2018, Dr Kirk Brown noted a clinical history of "low back pain following 1m fall on 13/9, known S3 fracture, left L5 radiculopathy". Dr Brown commented:

> "Moderate multi-level spondylitic degenerative change, maximal at L5/S1. Associated moderate bilateral foraminal narrowing at this level as well as mild to moderate narrowing of the lateral recesses greater on the right with the potential for impingement on the descending right S1 nerve root."

52. In a report dated 7 December 2018, Dr Omprakash Damodaran, treating neurosurgeon, noted that since the incident on 13 September 2018 Mr Mayuga had fairly severe back pain, bilateral buttock pain and bilateral leg symptoms. He noted that the right-sided leg symptoms had improved but the left-sided leg pain had persisted and radiated in the L5 distribution. He reported that Mr Mayuga had a limited range of lumbar flexion/extension movements and his straight leg raise test was reduced on the left hand side. He noted that the MRI demonstrated L5/S1 disc degeneration and loss of disc height and there was also evidence of a foraminal compression of the L5 nerve root and also L4/5 disc prolapse with lateral compression of the L5 nerve root. He considered that the L5 radiculopathy was a significant problem and recommended conservative management with a chiropractor, hydrotherapy and a CT guided transforaminal injection targeting the left L5 nerve root. He commented that surgical treatment in the form of a microdiscectomy may need to be considered if there was no improvement, but he was keen to avoid surgery given his history of chronic renal failure.

53. In a report dated 2 February 2019, Dr Damodaran noted he had reviewed Mr Mayuga who continued to have significant back pain and bilateral leg pain. He noted that Mr Mayuga recently underwent a transforaminal injection targeting the left L5 nerve root which gave pain relief for two weeks. He noted that Mr Mayuga had failed conservative management and now required operative intervention and had two surgical options. Dr Damodaran wrote:

> "1. An L5/S1 microdiscectomy and decompression of his bilateral L5 nerve roots;
>
> 2. An L5/S1 antero-lumbar interbody fusion.
>
> We have discussed both surgical options in detail. With the first surgical option there is a chance of failure given he has lost considerable disc height at L5/S1 but given that he is a dialysis patient he is keen to avoid any major surgery. Hence we have decided to pursue an L5/S1 microdiscectomy as the first step."

54. In a report dated 26 March 2019, Dr Damodaran noted that an L4/5 and L5/S1 laminectomy, discectomy and decompression of both L5 and S1 nerve roots had been performed on 22 March 2019. He noted that the patient prior to surgery indicated bilateral leg pain, particularly, in the L5/S1 distribution.

55. In a report dated 6 April 2019, Dr Damodaran noted he had reviewed Mr Mayuga, who had noticed an improvement since surgery in his leg pain.

56. In a report dated 29 June 2019 Dr Damodaran noted that Mr Mayuga had significant back pain and bilateral leg pain. He noted a transient improvement following the surgery but symptoms returned due to ongoing foraminal compression. Dr Damodaran wrote:

> "He has failed conservative management and would benefit from an anterior lumbar interbody fusion. This is to expand the foraminal space available for the nerve roots."

57. In a referral dated 29 June 2019, Dr Damodaran requested Dr David Robinson, vascular surgeon, to see Mr Mayuga in relation to the proposed anterior lumbar interbody fusion.

58. In a referral dated 12 September 2019 to Dr Schutz, Dr Damodaran noted that Mr Mayuga had a work related injury which resulted in back pain and bilateral leg pain and paraesthesia. He considered the symptoms were likely related to L5 nerve root compression in either foramen. Dr Damodaran said that Mr Mayuga initially underwent a posterior decompression, which temporarily improved his symptoms and there had been further return of the paraesthesia in his leg and foot.

59. In a report dated 3 July 2019, Dr David Robinson, vascular surgeon, stated that he had seen Mr Mayuga and noted he had diabetes and renal failure and was currently on dialysis. Dr Robinson noted that they were looking at an L5/S1 anterior lumbar interbody fusion and noted that on examination he was reasonably slim. Dr Robinson wrote:

> "We have discussed the planned operation and the approach. We have also discussed his potential complications. He has had an opportunity to ask any questions. He would appear to be suitable for his surgery."

60. In a report dated 9 October 2019, Dr Mark Russo, pain management physician, noted he had seen Mr Mayuga regarding his low back pain and bilateral lower limb pain. Under "History" Dr Russo wrote:

> "As you know, he sustained a work-related injury on 13 September 2018, when he fell 1m off a van, landing on concrete and he required an L5 laminectomy to treat bilateral L5 radiculopathy. He made improvement after that but still has ongoing back pain with some referral pain in the legs and he has been reviewed by yourself and an anterior interbody fusion has been recommended. For reasons that are not clear to me, this has been declined by an independent medical examiner and at this point, he has not proceeded with his proposed surgery."

61. Dr Russo noted that Mr Mayuga was currently on MS Contin and his pain remained significant. He noted that Mr Mayuga's health was remarkable for chronic renal failure and he was on dialysis every second day. Dr Russo said Mr Mayuga noted that his low back pain increased after dialysis as the drugs were washed out of his system.

62. Dr Russo noted that Mr Mayuga continued with physiotherapy and hydrotherapy with some short term benefit. On examination, Mr Mayuga was tender to palpation over the lumbar facet joints at L4/5 and L5/S1, had a positive piriformis test and a positive straight leg raise for reproduction of bilateral lower limb pain.

63. Dr Russo considered that treatment should be multi-modal and that the most definitive treatment for him would consist of an anterior interbody fusion and this decision needed to be reconsidered so he could proceed with the proposed surgery. Dr Russo also recommended the introduction of Cymbalta for anti-neuropathic agent effect. He suggested that there be a decrease in MS Contin. He considered that Mr Mayuga would benefit from seeing one of the Innervate pain management team for cognitive behavioural therapy assessment and input.

64. Dr Russo wrote:

> "For more definitive pain control, I have outlined the role for (since at this immediate point in time he is not proceeding with his surgery) lumbar facet joint radiofrequency neurotomy at L4/5 and L5/S1 in conjunction with piriformis injection of local anaesthetic and steroid and then separately addressing his leg pain via bilateral L5 dorsal root ganglion pulsed radiofrequency neurotomy."

65. In a report dated 19 December 2019, Dr Russo wrote:

> "I consulted with Mr Roberto Mayuga on 9 October 2019 where he described sustaining a work-related injury on the 13th of September 2018 when he fell 1m off a van, landing onto concrete and he required an L5 laminectomy to treat bilateral L5 radiculopathy. He made improvement after that but he still has ongoing back pain with some referral pain in the legs and he has been reviewed by Dr Omprakash Damodaran and an anterior lumbar interbody fusion has been recommended. For reasons that are not clear to me, this has been declined by an independent medical examiner and at this point, he has not proceeded with his proposed surgery.
>
> He is currently on MS Contin 10mg mane 15mg nocte. His pain remains significant on a numerical rating scale of 6/10 and it can vary anywhere between 3-9/10 in any given week.
>
> His health is remarkable for chronic renal failure and he is on dialysis every second day. He notices that his low back pain increases after dialysis as the drugs are washed out of his system.
>
> The most definitive treatment for him would consist of anterior lumbar interbody fusion and I have outlined to Roberto that I think this decision needs to be reconsidered so that he can proceed with the proposed surgery."

66. In a report dated 4 November 2019, Dr Anna Schutz, consultant neurologist, noted that Mr Mayuga experienced chronic sensation change and pain in the lateral aspect of his right foot as well as radiating up to his knee. She considered this was likely related to the lower lumbar and higher sacral nerve roots. She noted that Mr Mayuga had undergone a corticosteroid injection targeted at the L5 nerve root which gave him a two-week duration of pain reduction, and then he underwent a microdiscectomy at the same level which resulted in a three week reduction in pain levels. She reported he was currently managing his pain with MS Contin 10/15 although he notices the cognitive side effects. She noted he was receiving physiotherapy and also attending hydrotherapy twice a week.

67. Dr Schutz stated that Mr Mayuga was initially seen by her for nerve conduction studies, and these confirmed the presence of a moderately severe likely diabetic peripheral neuropathy. She stated that he was concerned that this meant that the diabetes could be contributing to his pain and this would be highly unlikely. She stated that it could not account for the higher pain, as the changes on the nerve conduction studies were symmetrical and this excluded a diabetic amyotrophy. She stated that in addition, Mr Mayuga described radicular type pain rather than a peripheral neuropathic type pain, which was far more likely to be explained by his back pathology.

68. Dr Schutz stated she had reviewed the scans and an MRI from this time last year which showed multilevel degenerative and compression changes. She stated that they looked worse in the lower lumbar regions with quite significant foraminal narrowing on both sides at L5/S1 levels.

69. Dr Schutz wrote:

> "It does not sound as though Roberto has had a bone scan, and if the next step in management is lumbar fusion, then I feel inflammatory pathology warrants exclusion. Roberto is aware that I do not feel a bone scan will be particularly revealing. It certainly sounds as though Roberto's pain is widespread and is not accounted for by a single nerve root level. I understand you are talking about a lumbar fusion, and I agree that this would be an appropriate next step. I understand Dr Mark Russo has recommended this also. Roberto has certainly

proven himself to be diligent in his physical therapy, and so he should be expected to make a good recovery from the operation. Clearly, his end-stage renal failure is a complicating factor."

70. In a report dated 14 January 2020, Dr Schutz noted she had conducted nerve conduction studies as requested by Dr Damodaran. She stated that Mr Mayuga had undergone a microdiscectomy which had resulted in a three week reduction in his pain levels and he was currently receiving opioid analgesia as well as physical therapy and was very diligent in his rehabilitation.

71. Dr Schutz stated that nerve conduction studies confirmed the presence of a moderate severity neuropathy that she felt to be diabetic in origin. She wrote:

> "Roberto was initially concerned that this meant that his diabetes could be contributing to his pain, and I felt this was very unlikely. It cannot account for the pain felt higher, and I was able to exclude a diabetic amyotrophy, which is diabetic neuropathy that can be painful. Roberto described a radicular type pain rather than a neuropathic type pain, and this would not fit with a diabetic cause."

72. Dr Schutz reviewed the imaging and commented that there was multi-level degenerative and compressive changes which would explain the lack of response to the higher level previous surgery. She stated there was significant foraminal narrowing on both sides L5/S1 levels. She stated that in terms of the proposed L5/S1 anterior lumbar interbody fusion there was a good chance that this would significantly improve Mr Mayuga's symptoms as it remained a significant area of pathology on imaging. She noted that he had been compliant with his physical therapy and his symptoms had not improved. She considered he had failed conservative treatment and long-term opioid therapy was not an ideal outcome. She concluded it was both reasonable and necessary for the surgery to go ahead.

73. The clinical notes from Practice at the Bay, included the following entries:

    (a) In an entry dated 12 October 2018, Dr Vivienne Miller noted that Mr Mayuga had fallen off the back of a truck on 19 September, about three weeks ago onto the coccyx and hit the back of his head as a secondary injury and since then had "low back pain constant and sciatica L and R had worsened now for the past 3 wk". She noted that there was pain going into the toes on the left side.

    (b) In an entry dated 15 October 2018, Dr Gillian Marsh noted that Mr Mayuga had ongoing severe left sciatica and had been seen at the hospital on Friday and had a CT scan but the report was not yet available. She reported he needed more Endone.

    (c) In an entry dated 19 October 2018, Dr Marsh noted that Mr Mayuga had been seen at the hospital and the CT showed he had fractured S3 together with *"a nerve root compression at a number of levels"*. She reported most pain was in the back but he had a left sciatica in an L4 distribution.

    (d) In an entry dated 3 November 2018, Dr Marsh noted Mr Mayuga had not improved and most of the pain was around the left lateral calf but he still had sacral pain. She noted that there was an L4 and L5 nerve root compression on CT done a few weeks ago. She referred the applicant to Dr Damodaran.

    (e) In an entry dated 30 November 2018, Dr Marsh noted that Mr Mayuga was to have a left L5 perineural injection and would see Dr Damodaran again in January.

(f) In an entry dated 24 December 2018, Dr Marsh noted that there was no change and neuropathic pain returned to the right lower limb three weeks after the injection.

(g) In an entry dated 1 February 2019, Dr Marsh noted that Mr Mayuga had been seen by Dr Damodaran and was to have an L5 microdiscectomy. She noted he had bilateral lower limb pain laterally to the top of the feet. She made a diagnosis of a bilateral L5 nerve root compression.

(h) In an entry dated 27 April 2019, Dr Marsh noted that Mr Mayuga had not improved since surgery and still had lower limb pain.

(i) In an entry dated 25 May 2019, Dr Marsh noted that there had been no benefit from surgery at this stage. She reported that he still had a lot of pain.

(j) In an entry dated 22 June 2019, Dr Marsh noted that Mr Mayuga was not better and had pain in the back and both lower limbs. She reported he was waiting on an appointment with Dr Russo.

74. In a report dated 12 June 2019, Liam Pattison, physiotherapist, noted that Mr Mayuga's functional capacity was limited. He noted that the main barrier to return to work was dealing with persistent pain and recommended Mr Mayuga be referred to the Hunter Integrated Pain Services for specific management. He noted that Mr Mayuga was completing an independent hydrotherapy routine, home exercise program and had recently progressed into a land based strengthening routine using a suspension trainer.

Discussion

75. The matter to be determined is whether the surgery proposed by Dr Damodaran, namely, an anterior interbody fusion at L5/S1, was reasonably necessary as a result of the injury on 13 September 2018.

76. For medical treatment to qualify as "reasonably necessary" it must be appropriate, including in the context of mitigating the effects of any injury to cure, alleviate, sustain the status quo, or to negate and stem progressive deterioration. It can be a question of degree to which treatments effectively alleviate injury symptoms and address pain management. There is a line of cases consistent with this analysis including *Rose v Health Commission (NSW)* (*Rose*) [1986] 2 NSWCCR 32.

77. Burke J in *Rose* (at pages 47-49) set out some general principles in relation to the issue of whether a particular regimen was medical treatment and whether it was reasonably necessary

"1. Prima facie, if the treatment falls within the definition of medical treatment in section 10(2), it is relevant medical treatment for the purposes of this Act. Broadly then treatment that is given by, or at the direction of, a medical practitioner or consists of the supply of medicines or medical supplies is such treatment.

2. However, though falling within that ambit and thereby presumed reasonable, that presumption is rebuttable (and there would be an evidentiary onus on the party seeking to do so). If is shown that the particular treatment afforded is not appropriate, is not competent to alleviate the effects of injury, then it is not relevant treatment for the purpose of the Act.

3. Any necessity for relevant treatment results from injury where its purpose and potential effect is to alleviate the consequences of the injury.

4. It is reasonably necessary that such treatment be afforded a worker if this Court concludes, exercising prudence, sound judgment and good sense, that it is so. That involves the Court in deciding, on the facts as it finds them, that the particular treatment is essential to, should be afforded to and should not be forborne by the worker.

5. In so deciding, the Court will have regard to medical opinion as to the relevance and appropriateness of the particular treatment, any available alternative treatment, the cost factor, the actual or potential effectiveness of the treatment and its place in the usual medical armoury of treatments for this particular condition."

78. The matters to be considered in a section 60 claim include the matters noted by Burke CCJ in *Rose* (supra) namely:

(a) the appropriateness of the particular treatment;
(b) the availability of alternative treatment, and its potential effectiveness;
(c) the cost of the treatment;
(d) the actual or potential effectiveness of the treatment, and
(e) the acceptance by medical experts of the treatment as being appropriate and likely to be effective.

79. In *Diab v NRMA Ltd* [2014] NSWWCCPD 72 (*Diab*) Roche DP observed at [89] that:

> "With respect to point (d), it should be noted that while the effectiveness of the treatment is relevant to whether the treatment was reasonably necessary, it is certainly not determinative. The evidence may show that the same outcome could be achieved by a different treatment, but at a much lower cost. Similarly, bearing in mind that all treatment, especially surgery, carries a risk of a less than ideal result, a poor outcome does not necessarily mean that the treatment was not reasonably necessary. As always, each case will depend on its facts…
>
> [105] …on its own, a reduction in pain after the particular treatment does not necessarily 'meet' the test of reasonably necessary in section 60, it is a factor that can be considered in determining that issue. More importantly, it should be considered in light of the expert evidence and relevant history of the development of the symptoms…"

80. There is no dispute that Mr Mayuga injured his low back when he fell off the truck on 13 September. He then sought treatment from his general practitioner, Dr Miller, when the pain increased and was referred to a chiropractor and prescribed analgesics. On 12 October 2018, Mr Mayuga attended Gosford Hospital Emergency Department, where Dr Reid noted worsening bilateral sciatic pain from the lateral gluteal region radiating down the back of both legs to the soles of the feet. Dr Marsh then referred Mr Mayuga for an MRI scan and specialist review. The treating neurosurgeon, Dr Damodaran, saw Mr Mayuga in early December 2018 and noted that since the fall on 13 September 2018, Mr Mayuga had fairly severe back pain, bilateral buttock pain and bilateral leg symptoms.

81. Dr Damodaran noted that the MRI demonstrated L5/S1 disc degeneration and loss of disc height and there was also evidence of a foraminal compression of the L5 nerve root and also L4/5 disc prolapse with lateral compression of the L5 nerve root. He considered that the L5 radiculopathy was a significant problem and recommended conservative management with a chiropractor, hydrotherapy and a CT guided transforaminal injection targeting the left L5 nerve root. He commented that surgical treatment may need to be considered if there was no improvement, but he was keen to avoid surgery given the history of chronic renal failure.

82. On 2 February 2019, Dr Damodaran reviewed Mr Mayuga and noted that Mr Mayuga had pain relief for two weeks following a recent a transforaminal injection targeting the left L5 nerve root. Dr Damodaran considered that Mr Mayuga had failed conservative management and now required operative intervention.

83. Dr Damodaran noted that he discussed in detail two surgical options with Mr Mayuga. Firstly, an L5/S1 microdiscectomy and decompression of his bilateral L5 nerve roots, and secondly, an L5/S1 antero-lumbar interbody fusion. Dr Damodaran noted that with the first surgical option there was a chance of failure given Mr Mayuga had lost considerable disc height at L5/S1 but, because he is a dialysis patient, he was keen to avoid any major surgery. Therefore, a decision was made to pursue an L5/S1 microdiscectomy as the "first step."

84. An L4/5 and L5/S1 laminectomy, discectomy and decompression of both L5 and S1 nerve roots was performed on 22 March 2019 and Mr Mayuga initially noticed an improvement in his leg pain. However, on 29 June 2019 Dr Damodaran noted there had been a transient improvement following the surgery but symptoms returned due to ongoing foraminal compression. He reported that Mr Mayuga had significant back pain and bilateral leg pain. Dr Damodaran considered that Mr Mayuga had failed conservative management and required an anterior lumbar interbody fusion to expand the foraminal space available for the nerve roots.

85. The respondent submitted that the proposed anterior lumbar interbody fusion was unlikely to succeed, relying on the report of Dr Casikar. I accept that Dr Casikar made a diagnosis of degenerative disease of the lumbar spine related to longstanding diabetes and he expressed the opinion that Mr Mayuga's symptoms were not related to any neurological aggravation at L4/5 segment and there was no evidence of nerve root compression. He considered that these factors were a major barrier and surgery was likely to fail to improve symptoms. He noted that the microdiscectomy has failed and further surgery would also fail.

86. However, Dr Casikar was the only doctor who made a diagnosis of degenerative disease of the lumbar spine related to longstanding diabetes and expressed the view that there was no neurological aggravation and no evidence of nerve root compression.

87. Dr Standen provided a very detailed report and expressed the view that there was persistent pain and significant pain associated disabilities. She stated that contributors to the current pain presentation included nociceptive lumbar pain in relation to prior work-related injury and subsequent spinal surgery and lower limb neuropathic pain caused by a distal peripheral neuropathy probably secondary to type 2 diabetes, and by a bilateral lower limb radiculopathy in an L5 distribution secondary to L5 nerve root compression. She reported that the probability of this is increased by clinical examination consistent with reduced power in a bilateral L5 myotomal distribution.

88. Dr Damodaran reported that Mr Mayuga had significant back pain and bilateral leg pain and the symptoms returned after the laminectomy, discectomy and decompression due to ongoing foraminal compression. Dr Damodaran recommended an anterior lumbar interbody fusion in order to expand the foraminal space available for the nerve roots. Dr Damodaran considered that the back pain and bilateral leg pain and paraesthesia were likely related to L5 nerve root compression in either foramen.

89. Dr Russo, on examination, noted that Mr Mayuga was tender to palpation over the lumbar facet joints at L4/5 and L5/S1, had a positive piriformis test and a positive straight leg raise for reproduction of bilateral lower limb pain.

90. Dr Schutz carried out nerve conduction studies, which confirmed the presence of a moderately severe likely diabetic peripheral neuropathy. She stated that it was highly unlikely that the diabetes could be contributing to his pain as it could not account for the higher pain, and the changes on the nerve conduction studies were symmetrical and this excluded a diabetic amyotrophy. She noted also that Mr Mayuga described radicular type pain rather than a peripheral neuropathic type pain, and this radicular type pain was far more likely to be explained by his back pathology.

91. Dr Schutz stated that the scans showed multilevel degenerative and compression changes with quite significant foraminal narrowing on both sides at L5/S1 levels.

92. The weight of the medical evidence supports a finding that Mr Mayuga has significant back pain and bilateral leg pain due to ongoing foraminal compression resulting from the injury sustained on 13 September 2018. I prefer the evidence of Dr Damodaran, Dr Standen, Dr Schutz and Dr Russo to that of Dr Casikar. I do not accept Dr Casikar's opinion that Mr Mayuga has degenerative disease of the lumbar spine related to longstanding diabetes, the symptoms were not related to any neurological aggravation and there was no evidence of nerve root compression. I therefore do not accept Dr Casikar's opinion that the surgery would fail. It was significant, in my view, that Dr Damodaran had foreshadowed the possibility that the microdiscectomy and decompression of his bilateral L5 nerve roots, might fail because Mr Mayuga had lost considerable disc height at L5/S1. However, the L5/S1 microdiscectomy was carried out because Mr Mayuga was keen to avoid any major surgery and I accept that this was a reasonable approach to take in all the circumstances.

93. The respondent submitted that the treatment was not appropriate treatment because of the risks involved for Mr Mayuga, who had a number of significant co-morbidities.

94. There is no dispute that Mr Mayuga had a number of significant comorbidities which increase the risk in surgery of an adverse outcome. However, Mr Mayuga stated, and I accept that he has significant pain which has a severe impact on his life. Dr Standen noted that pain was problematic both day and night and pain associated disability was significant with pain impacting on sleep, mood and ability to return to work.

95. Dr Damodaran has recommended an anterior lumbar interbody fusion in order to expand the foraminal space available for the nerve roots. Dr Russo considered that this treatment was "the most definitive treatment" available and Dr Schultz supported this treatment after performing nerve conduction studies and reviewing the imaging.

96. Dr Casikar was not sure that the proposed surgery was necessary considering the various co-morbidities. He considered renal failure and bronchogenic carcinoma as barriers to surgery as well as failure of the previous surgery and diabetic neuropathy.

97. The respondent relied on the opinion of Dr Truskett and argued that it would not be possible to conclude exercising prudence, sound judgment and good sense, that this treatment should be afforded to Mr Mayuga.

98. Dr Truskett reported that Mr Mayuga had significant comorbidities that may impact on health risks associated with anaesthesia and spinal fusion. He also noted that there was a risk that surgery may not resolve his pain, but this had been discussed by others. Dr Truskett was asked to assess the likelihood of the benefits from surgery, but said he was unable to answer this question as he had not examined Mr Mayuga and he would defer to a neurosurgical opinion in that regard.

99. In terms of the impact of comorbidities, Dr Truskett referred to the American College of Surgeons NSQIP which is a surgical outcome database, that enables the potential risks of particular operations to be calculated. He attached the calculator results for the procedure described as an anterior interbody technique. I noted that the risk factors identified by Dr Truscott included "age, sex, partially dependent functional status, ASA severe systemic disease, Diabetes (insulin) HTN, Smoker and Dialysis". Dr Truskett added a risk of somewhat higher than estimate because Mr Mayuga had chronic airways disease and asthma and had a history of pneumonia, which he believed would place him at higher risk than average. Dr Truskett said the chart demonstrated Mr Mayuga has significant risk for this procedure compared to the average patient and his risk of death was 2.4% as compared to the average of 0.1%. He noted that the figures were the result of an American population but considered that the risks would be similar.

100. I asked counsel to provide the names of any authorities in cases concerning claims for proposed medical treatment that referred to the issue of risk in a situation where a worker had comorbidities. The respondent referred to *Broadspectrum Australia Pty Ltd v Skiadas* [2019] NSWWCCPD 31 and *Broadspectrum Australia Pty Ltd v Gunaratnam* [2019] NSWWCCPD 36. Both of these cases referred to *Rose* and *Diab* and concerned the question of whether the surgery proposed would make a difference to the worker's symptoms, that is, the potential effectiveness of the surgery and whether there was a chance of a sufficient benefit if surgery was performed. Neither case specifically addresses the question of risk to the worker in proposed surgery where the worker has comorbidities.

101. The applicant referred to *Diab* at paragraph 89 which I have already referred to in paragraph 79 above.

102. The statistics referred to by Dr Truskett represent only one aspect of decision making in this case in that they are confined to the additional risks to Mr Mayuga from having the proposed surgery, and they do not consider all the risks to Mr Mayuga from not having the proposed procedure. Further, it is necessary to focus not upon any additional risks to Mr Mayuga in having the proposed surgery but upon the statutory criterion of whether the proposed surgery, is in all the circumstances, reasonably necessary. Moreover, it can be assumed that in recommending the proposed surgery various doctors have taken into account any risks to Mr Mayuga from having the proposed surgery and also the risks to Mr Mayuga in not having the proposed surgery.

103. I am satisfied that the treating doctors have considered the question of risk and discussed it with Mr Mayuga. All the treating doctors have a detailed history of the comorbidities. Dr Damodaran referred Mr Mayuga to a vascular surgeon after he recommended the fusion. Dr Robinson said that they discussed the planned operation, the approach and also discussed the potential complications. Dr Robinson said that Mr Mayuga appeared to be suitable for the surgery. While the referral to Dr Robinson may have been required as a vascular surgeon was required to mobilise the aorta to provide approach for the fixation device, I am satisfied that Dr Robinson discussed potential complications and risks and would not have concluded that Mr Mayuga was suitable for the surgery if he had considered that the risk factor was unacceptable.

104. Mr Mayuga was reviewed by a respiratory physician, Dr Roach, in late 2018 who stated that from the respiratory perspective Mr Mayuga was stable, had no symptoms of chronic bronchitis and had successfully completed treatment for tuberculosis.

105. Dr Truskett did not examine Mr Mayuga, nor did he discuss the comorbidities with the general practitioner. His calculation was based on data sourced in the United States and I am not persuaded that the outcomes would necessarily be the same in Australia as these countries have some differences in their health systems. Therefore, I have placed less weight on Dr Truskett's opinions.

106. While I accept that the risk factor for Mr Mayuga may be higher that it would be if he did not have the comorbidities he has, it is clear that that the treating doctors, after examination after discussions with Mr Mayuga, have recommended surgery. There is a risk factor in all surgery. It is a question of balancing the prospective benefits of the surgery as against the risk factors involved in surgery. Mr Mayuga wishes to proceed with the surgery. I do not consider that in all the circumstances the risk factor is such that the surgery is not an appropriate form of treatment.

107. On balance I am satisfied that the proposed anterior lumbar interbody fusion is appropriate treatment as extensive conservative treatments has failed in Mr Mayuga's case. I am satisfied that the treating doctors all considered that this treatment was appropriate and likely to be effective.

108. There was some reference made to alternative treatment that was suggested by Dr Russo in his report dated 9 October 2019. However, these suggestions had only been provided because at that time Mr Mayuga was unable to proceed with the anterior lumbar interbody fusion because the insurer had not approved it. Dr Russo outlined the role for lumbar facet joint radiofrequency neurotomy at L4/5 and L5/S1 in conjunction with piriformis injection of local anaesthetic and steroid and for leg pain bilateral L5 dorsal root ganglion pulsed radiofrequency neurotomy.

109. Dr Standen commented on the treatment outlined by Dr Russo and noted that all procedures suggested by Dr Russo had evidence in clinical practice. She also observed that normal clinical practice was to undertake diagnostic medial branch blocks of the lumbar facet joints in question prior to radiofrequency neurotomies. However, she expressed the opinion that if Mr Mayuga had entrapment of the bilateral L5 nerve roots, pulsed radiofrequency neurotomies of the nerve roots were unlikely to provide significant clinical benefit in the absence of recommended spinal surgery. She considered that radiofrequency neurotomies of the lumbar facet joints could assist with nociceptive lumbar pain secondary to facetogenic contributors.

110. Dr Standen reported that Mr Mayuga was describing significant side effects associated with medications which he was currently prescribed. She commented that oral analgesics were appropriate and doses were contained, but there was little room to move in that area, and she would not like to see any escalation of opioid analgesics as tolerance and dependency on this class of medication would escalate swiftly. She observed that Lyrica was associated with significant cognitive side effects and gait disturbance, which was worrying. Dr Standen also commented that alternative appropriate interventional measures in the absence of spinal surgery included trialling a spinal cord stimulator.

111. Mr Mayuga takes oral analgesics including opioid analgesics. Dr Russo reported that Mr Mayuga noticed that his low back pain increased after dialysis as the drugs were washed out of his system.

112. Mr Mayuga has stated that he wishes to undergo the recommended spinal surgery. He stated that in early May 2020 he underwent the steroid injection, namely, a diagnostic medial branch block to the lumbar facet joint, as suggested by Dr Standen. Mr Mayuga said that he had not received relief from this treatment and the pain had returned after the treatment. Mr Mayuga said that Dr Russo had indicated to him that the most effective treatment pathway was to undergo the proposed fusion surgery, and this would be the way to most effectively minimise his pain. Mr Mayuga stated that any previous conservative management administered to him had wholly failed and the pain had returned and he did not wish to undergo further conservative procedures and treatments that historically had not provided him relief and had required him to undergo rehabilitation and recovery periods.

113. I am not persuaded that the alternative treatment suggested by Dr Russo and Dr Standen would be effective in terms of providing Mr Mayuga with pain relief and improving his quality of life. Indeed, Dr Standen considered that if Mr Mayuga had entrapment of the bilateral L5 nerve roots, pulsed radiofrequency neurotomies of the nerve roots were unlikely to provide significant clinical benefit in the absence of recommended spinal surgery. Dr Russo considered that the anterior lumbar interbody fusion was the definitive treatment in this case.

114. Dr Casikar was the only doctor to express the view that anterior lumbar interbody fusion would fail. For the reasons expressed above, I do not accept Dr Casikar's opinion. The treating neurosurgeon, Dr Damodaran, the treating pain management specialist, Dr Russo and the neurologist, Dr Schultz, all consider that this is potentially the most effective treatment after the failure of conservative treatment to date. Dr Schultz stated that there was a good chance that the proposed L5/S1 anterior lumbar interbody fusion would significantly improve Mr Mayuga's symptoms.

115. In summary, at this stage I am not persuaded that there are any effective alternative treatment available and other forms of treatments have not been effective. I am satisfied that the general consensus of the doctors is that although the outcome is not guaranteed, the anterior lumbar interbody fusion is an appropriate form of treatment for management of chronic pain. I am also satisfied that the potential effectiveness would be significant given Mr Mayuga's current state.

116. Adopting Burke J's analysis, the potential effect of the proposed treatment is to alleviate the consequences of the injury. It was the opinion of Dr Damodaran, Dr Russo and Dr Schultz that the treatment was appropriate, and its purpose and potential effect was to alleviate the consequences of the injury. I find that it is reasonably necessary that Mr Mayuga undergo the surgery proposed by Dr Damodaran, namely, an anterior lumbar interbody fusion.

117. I order that the respondent pay the applicant's section 60 expenses in respect of the treatment proposed by Dr Damodaran, namely, an anterior lumbar interbody fusion, and associated expenses on production of accounts and/or receipts.