

the 9 January 2013 accident was not the cause of the disc protrusion. A review application was filed in relation to that revocation decision. At the review hearing the Reviewer upheld ACC's decision. This is an appeal from that Review decision.

Background

[3] Mr Singh came to New Zealand from India in 2012. He was working in his brother's fruit and vegetable shop on 9 January 2013. He was aged 37 years at the time and prior to the lifting event he had not experienced problems with his back. There were boxes of produce on a trolley that he was putting into a chiller. When he picked up a box of lemons, he said that he heard a crack in his back. He had to lie down as the pain was getting worse. The back pain then spread to his right leg. Within a few days the pain was such that he could not lie down or sit down. He went to a Doctor. The Dr completed an ACC form. The Doctor ordered an X Ray which was essentially normal apart from a slight reduction in the height of the L5/S1 disc.

[4] Because the lower back pain did not improve Mr Singh had an MRI scan on 25 February 2013. The findings included:

A reduction in disc signal at L4/L5 and L5/S1. At L4/L5 there is a mild broad-based disc bulging, which results in mild narrowing of the central canal. At L5/S1 there is a small right paracentral disc protrusion measuring 5mm in AP dimension. This contacts the right S1 nerve roots after they exit the thecal sac, but does not clearly compress them. The L5 nerve root structures exit freely.

[5] The following day Mr Singh was seen by Mr Richard Somerville who is an Orthopaedic Surgeon. He felt Mr Singh had classic right sided sciatica and his presentation was consistent with an L5/S1 disc protrusion.

[6] On 23 March 2013 Dr Luk Chin an Anaesthetist administered an epidural injection. When Mr Singh saw Dr Chin he recorded Mr Singh as having pain in the lower leg down to the foot which was there most of the time. He was worse when sitting and weight bearing – eases with lying. Straining made it worse. He was noted as having Parathesis²⁺⁺ Slump test positive on right side.³

¹ 5th lumbar/1st sacral disc.

² pins and needles.

³ A slump test is used to evaluate for lumbar nerve root impingement or irritation.

[7] The leg pain resolved following the treatment from Dr Chin but Mr Singh still had back pain. However, he was able to return to work in March on counter duties. When he saw Mr Somerville on 28 May 2013, Mr Somerville recorded that Mr Singh had suffered a fairly good episode of sciatica and that it would take 12 to 18 months to settle down. Mr Singh continued to have physiotherapy and acupuncture. In early 2014 Mr Singh still had the back pain and as at October of that year he was still seeing medical personnel.

[8] On 9 February 2018, Mr Singh re-injured his back while lifting a box of springs weighing approximately 25kgs. Mr Singh soldiered on at work and was put on light duties. It got to the point that he was unable to stand. He was told to see his GP and to take some time off work. This time the pain was in the lower and upper back and the pain was radiating down the left leg. An ACC claim form was filed on 28 February 2018 and Mr Singh was given cover for a lumbar sprain.

[9] An MRI scan was performed on 12 March 2018. The report findings included:

Disk desiccation at L4/L5 levels. Broad based posterior central disk protrusion at L4/L5 with focal annular tear. The disk protrusion narrowing bilateral lateral recesses and abutting bilateral L5 nerve roots. Focal central disk protrusion and annular tear at L5/S1, no nerve root compromise.

[10] On 22 May 2018 Mr Singh was seen by Mr Choy Orthopaedic Spinal Surgeon. Dr Choy recommended ongoing physiotherapy. He noted on an ACC18 the diagnosis of “back injury – 4/5 5/1 annular tear”.

[11] This was considered by ACC Branch Medical Advisor, Dr Millar-Coote in a document dated 19/6/2018. He was asked to say what the diagnosis was. Dr Millar-Coote said the symptom of pain going down the left leg from a clinical point of view would make one suspect there is mechanical compression of a lumbar nerve root on the left. Dr Choy had said there was a transient impingement of the L5 nerve root and likely L4/5 and L5/s1 annular tear. He said he agreed with that diagnosis from a clinical point of view. But it was difficult to match this with the MRI imagery. The report said the disc was abutting the bilateral L5 nerve roots which raised the question why there were no symptoms in the right leg. He thought the 2013 and 2018 scans reported similar findings. He did not think the disc had changed which

raised the question of what structural change or injury had the accident caused? He said one could point to the annular tears, but these are seen in people who are asymptomatic. He would not support ACC covering annular tears or a lumbar disc prolapse. He thought Mr Singh would recover within 6 to 8 weeks.

[12] Dr Millar-Coote was asked to prepare some questions to be put to Mr Choy. Mr Choy responded to ACC on 27 June 2018. He agreed that Mr Singh had a degree of pre-existing disc protrusion with a degree of lateral recess stenosis. He felt his injury had stirred up his lateral recess stenosis and caused transient L5 nerve impingement. He said he did not believe Mr Singh's annular tears were from his current injury. But it was conceivable they were from his last injury. He said that MRI findings did not always correlate with symptoms. So even though it showed bilateral potential nerve root impingement it is conceivable Mr Singh only had unilateral symptoms. The fact that radiographic stenosis can exist without being symptomatic has formed the basis of many ACC declines for cover arguing that the stenosis was pre-existing and simply rendered symptomatic by an injury. He agreed the two scans were similar. But on both of them there was a degree of lateral recess stenosis which is contributed to by the disc protrusion. It was likely his nerve root is always under a degree of tension and this has been rendered symptomatic by the injury.

[13] Dr Millar-Coote commented on Mr Choy's letter. He interpreted Dr Choy's comments as indicating that the lifting did not cause a new injury. It was not as easy to say the same with the 2013 injury. The presence of a disc bulge did not automatically mean it was caused by an accident as they can be asymptomatic. Given the similarity between the two scans, the event no more changed the disc in 2018 as it did in 2013.

[14] On 24 July ACC declined cover for L4/L5 and L5/S1 annular tears from the 2018 accident. It also suspended Mr Singh's entitlement to weekly compensation on the 2018 injury.

[15] Mr Singh was referred for an injection which Mr Choy hoped would be covered by ACC. Mr Choy said surgery would not be unreasonable if Mr Singh remained symptomatic after 3 months.

[16] On 21 August 2018 ACC revoked cover and the suspension decisions in favour of Mr Singh due to the failure to issue a cover decision on the annular tears within the requisite time and insufficient information to suspend.

[17] On 14 September a CT guided steroid injection was administered. On 6 November Mr Choy referred Mr Singh for nerve conduction studies.

[18] ACC declined cover for a lumbar disc prolapse from the 2018 accident on 7 November 2018. On 22 November 2018 ACC revoked deemed cover for an annular tear of the lumbar disc from the 2018 accident.

[19] Mr Singh applied to review both decisions. In a decision dated 13 September 2019, a Reviewer upheld ACC's decisions. Mr Singh's counsel requested that ACC investigate cover for the disc protrusion that Mr Choy had linked to the 2013 injury. This was declined in a decision dated 7 November 2019.

[20] Mr Singh's counsel raised with ACC the issue about a request for further physiotherapy treatment on 29 August 2013 had added the additional diagnosis of "ongoing disc protrusion with dysfunction/instability". ACC had approved the further treatment. It was argued that Mr Singh had deemed cover for this as no cover decision had been issued within the statutory timeframes. In a decision dated 3 December 2019 ACC revoked the cover decline decision and confirmed Mr Singh had cover for a disc protrusion from 20 September 2013 by way of a deemed decision. However, the next day on 4 December 2019 ACC revoked the deemed cover on the basis that the 2013 decision was not the cause of the disc prolapse. That decision was the subject of a review application.

The Review Decision.

[21] The hearing occurred on 2 June 2020 and the decision is dated 29 June 2020. The Reviewer set out the various medical opinions relating to Mr Singh's back pain. These were greater in number than those I have already referred to.

[22] Mr Pai an orthopaedic surgeon had provided an assessment at the request of ACC. In short form Dr Pai considered that there was disc degeneration and spondylosis⁴ which are the result of several factors acting individually or collectively. These included genetic, age related constitutional changes and micro or macro traumas. People with degenerative disc can present with disc bulge/protrusion, herniation, annular tears or discogenic pain following a trivial event. Sciatica can be precipitated spontaneously with or without trauma. In a supplementary report Mr Pai said the underlying diagnosis of lumbar spondylosis predated the 2013 event. He also said that as Mr Singh's symptoms were persisting after 6 months that it was likely he required cognitive behavioural treatment and he should look for alternative work as labouring work can precipitate back symptoms. He felt there was a psychosocial element present.

[23] Mr Choy had written a letter dated 10 June 2019 in which he postulated that the 2013 lifting injury was an acute disc injury at the very least at L5/S1. In response to a question about whether non injury factors had contributed to Mr Singh's condition, Dr Choy said this was impossible to prove, but given the time relationship to his 2013 injury, it was reasonable that a substantial proportion of his symptoms and his MRI findings were at least partially due to his injury mechanism.

[24] Dr J Clifton is a branch medical advisor. Her view was that the L5/S1 disc pathology was not caused by the accident on 9 January 2013.

[25] Mr Singh consulted Mr Warren Leigh an orthopaedic and spinal surgeon on 1 April 2020. This was in the middle of the first Covid lockdown and occurred electronically. Given this, Mr Leigh was not able to examine Mr Singh. He diagnosed Mr Singh as suffering from discogenic pain with some mild radiculopathy

⁴ Spinal stenosis.

symptoms. Mr Leigh was asked to provide an opinion on the causal link between that condition and Mr Singh's 2013 accident. He described the 2013 accident as a clear lifting injury that weighed in excess of 10-20kgs. This was a significant enough weight to cause damage to the disc. Mr Singh had not had any problems with his back prior to this. Because there was no MRI prior to 2013 it was hard to delineate exactly what happened at the time. But he was only 37 years young and he did not believe that the discogenic changes would have been wholly or substantially caused by a degenerative process or pre-existing spondylosis.

[26] Mr Leigh was asked to comment on Mr Pai's opinion that the pathology identified on the 2013 MRI scan pre-existed Mr Singh's 2013 injury. Mr Leigh said that given there were changes at 2 levels in Mr Singh's spine this would suggest a degree of underlying change prior to 2013. But the injury did result in a disc protrusion that caused classical sciatica. This settled with a steroid injection indicating an injury with resolution with an accepted treatment for that injury.

[27] Dr Clifton provided a further report after considering Mr Leigh's report. Her view was that disc abnormalities are common in asymptomatic people, arising as part and parcel of changes to the disc with no history of antecedent trauma. She listed studies that support this. Dr Clifton said that just because the symptom onset occurred in association with the lifting a crate of lemons did not mean that any of the reported findings occurred acutely at that point. The Clinical Advisory Panel (CAP) Principal clinical advisor, Dr Fong, provided comment on 27 May 2020. Dr Fong agreed that the MRI findings were degenerative disc disease.

[28] The Reviewer then considered the legal issues including that a temporal connection between an accident and the onset of symptoms is an important factor to be taken into account. And that there is no cover for aggravation of a non-accident related condition and no cover for acceleration of such a condition. Only the injury can be covered. The Reviewer also referred to the need for the court to have sufficient proof of a causal link between the covered injury and the entitlement sought.

[29] The Reviewer agreed there was a strong temporal connection between the accident and the onset of Mr Singh's symptoms. But that this by itself was insufficient. In terms of Dr Choy's opinion, the Reviewer thought that he did not adequately address the multi-level disc pathology and Mr Leigh had conceded there was a degree of underlying change that existed prior to the January 2013 accident. He described Mr Pai's opinion as thorough which was supported by the medical imaging. Dr Clifton agreed with Mr Pai. Dr Fong relied on the medical imaging to support his opinion. All three considered that 2013 accident and that the pathology existed prior to the accident. The Reviewer preferred the opinions of Drs Pai, Clifton and Fong. And dismissed the review application.

Submissions for the appellant

[30] It was submitted there was a compelling temporal link between Mr Singh's accident in January 2013 and the onset of his lower back pain. He presented for treatment just 2 days after the accident and his symptoms required treatment for almost 2 years. These eventually settled down until the reinjury in February 2018.

[31] Mr Singh was 37 at the date of his 2013 accident and had not had symptoms prior to it. Mr Choy said that given the time relationship between the accident and the onset of symptoms, on the balance of probabilities, the lifting event had contributed significantly to Mr Singh's symptoms.

[32] Mr Leigh considered Mr Singh's lack of symptoms prior to the 2013 accident as well as his age as being persuasive evidence in favour of the accident causing a disc protrusion at L5/S1. Another important consideration is whether the mechanism of injury is consistent with the injuries sustained. Mr Singh had a clear lifting injury of substantial weight. Mr Choy opined that the mechanism of a lifting injury likely caused the disc injury, certainly at the very least, at L5/S1.

[33] Mr Leigh also commented on the mechanism and stated that a box of lemons that weighed in excess of 10 – 20 kg is a significant enough weight to cause damage to the discs.

[34] Mr Pai has not provided analysis of the mechanism of the injury in this case. Nor does it appear to be contested that lifting a box weighing over 20 kgs would constitute a significant mechanism for a disc injury.

[35] Dr Fong has dismissed the accident as causative, but has provided no analysis as to why, only citing the presence of other pathology in support of an assertion that the accident could not have caused the disc protrusion.

[36] Mr Choy is the treating specialist and he is of the opinion there is a causal link between the 2013 accident and the L5/S1 disc protrusion. This is set out in Mr Choy's report dated 20 June 2019. Mr Leigh noted that without preinjury imaging, the history had to be relied on. He confirmed his opinion that the injury resulted in a disc protrusion. Both spinal surgeons are of the opinion that there is a link between the accident and the disc protrusion.

[37] Mr Singh does not have to show the accident was the sole reason and a major cause of his condition. Cover can only be excluded if the personal injury has been caused wholly or substantially by non-injury factors (see s 26 of the Act). In *Treloar v Treloar*,⁵ McGechan J said that:

... The word 'substantially' is not used in a context envisaging a building upwards from nothing; or in an objective comparative way. The use envisages a relatively marginal departure away from the entirety.

This has consistently been approved, including in a recent case of *Reti v Accident Compensation Corporation*.⁶

[38] In term of ACC's expert, Mr Pai has asserted that Mr Singh's pathology pre-existed the 2013 accident but provided no reasoning in support of his opinion other than reference to generalised statistics. These establish no more than that the kind of pathology at issue in this case can occur in the absence of trauma. However, it is also the case that such pathology can be caused by trauma. Mr Pai and Dr Fong were required to consider the impact of Mr Singh's accident and provide reasoning as to

⁵ *Treloar v Treloar* 2 [1988] 5 NZLR 209.

⁶ *Reti v Accident Compensation Corporation* [2016] NZACC 163.

why the accident had no part to play whatsoever. No such reasoning has been provided.

[39] In *Ballagh v Accident Compensation Corporation*⁷ Judge Beattie rejected the suggestion that back injuries can only arise from a non-traumatic cause. In *Manning v Accident Compensation Corporation*⁸, Judge Ongley observed that there was evidence to show that accident trauma caused a further injury to a weakened disc. There was an underlying degenerative condition, but there was also an accident precipitating change.

[40] In *Black v Accident Compensation Corporation*,⁹ Judge Joyce, QC, referred to a CAP opinion which relied on the literature. His Honour said this pays no attention to the fact that there was a distinctly dramatic accident event.

[41] Similarly, in *Jackson v Accident Compensation Corporation*,¹⁰ Judge Powell referred to the evidence of the appellant's surgeon, whose opinion took into account the appellant's evidence as to the severity of the accident. Other medical opinion had not given any real consideration to this.

[42] Dr Fong has taken the same approach, relying on radiological findings and generalised literature to support his opinion that the disc protrusion was degenerative. Dr Fong was at pains to characterise this as degenerative and used the word at least 20 times in his brief comment. Radiology from 2013 is far from emphatic in describing the pathology identified as degenerative as Dr Fong would have us believe. The 2013 x-ray notes a slight reduction and height of L5/S1 and minor disc change at that level, otherwise it is a normal study. The MRI similarly notes only reduction in disc signal at L4/5 and L5/S1 with mild bulging at L4/5 resulted in mild narrowing and protrusion of L5/S1. Changes are not described as markedly significant.

⁷ *Ballagh v Accident Compensation Corporation* [2009] NZACC 19.

⁸ *Manning v Accident Compensation Corporation* [2012] NZACC 166.

⁹ *Black v Accident Compensation Corporation* [2012] NZACC 222.

¹⁰ *Jackson v Accident Compensation Corporation* [2013] NZACC 356.

[43] Reviewing literature is a poor substitute for medical assessment and proper consideration of a claimant's circumstances. Reference was made to *Accident Compensation Corporation v Ambros*,¹¹ where the Court was referring to *Greg v Scott*, where Lord Nicholls said that statistics are an imperfect means of assessing outcomes even in groups of patients undergoing treatment, let alone a means of providing an accurate assessment of the position of one individual patient. While statistical evidence may be of use in the assessment of causation, the limitations must clearly be born in mind.

[44] In *Smith v Accident Compensation Corporation*,¹² Judge Mathers said:

... There is a danger, as Mr Mistry points out, that blaming "degeneration" for persisting pain following what in this case has been accepted by ACC as an accident, means denying claims on a population basis rather than particular circumstances.

A similar observation is made by Judge Henare in *O'Connor v Accident Compensation Corporation*.¹³

[45] Both Mr Choy and Mr Leigh acknowledge that pre-existing pathology may have been present at the time of Mr Singh's 2013 accident. Both surgeons agree that it was not the whole or substantial cause of the L5/S1 disc protrusion. This is not a sufficient basis to decline cover for a disc protrusion. ACC can only decline cover if these pre-existing factors contributed almost entirely to Mr Singh's L5/S1 disc protrusion. The evidence supports that this is not the case. Mr Choy felt it would be reasonable to attribute a substantial portion of Mr Singh's symptoms and MRI findings to his 2013 accident. Mr Leigh similarly considers the 2013 accident caused the disc protrusion. Mr Singh's condition was not wholly or substantially due to any pre-existing changes that may have been present in 2013.

[46] In a review against a revised deemed decision, the question simply becomes whether the claimant should have cover for an injury, inviting analysis of whether there is a causal link between Mr Singh's accident and the injury. Mr Singh needs to show:

¹¹ *Accident Compensation Corporation v Ambros* [2007] CA 304 [2008] 1 NZLR 340.

¹² *Smith v Accident Compensation Corporation* [2020] NZACC 98.

[a] There is a causal link between his L5/S1 disc protrusion and his 2013 accidents; and

[b] That his L5/S1 disc protrusion is not wholly or substantially due to gradual process disease or infection.

[47] Mr Singh does not have to prove, to the standard of medical certainty that the accident caused his injury, he only needs to prove it on the balance of probabilities.¹⁴

[48] The Courts have accepted that a temporal connection is an important piece of evidence that can bring the matter of causation from possibility to probability and while each case must turn on its facts, the principles of the decision in *Ambros* must be borne in mind when approaching the evidence.

[49] Factors where the Court found to be useful in determining causation include:

[i] Whether there is a temporal link between the accident and the onset of symptoms;

[ii] Whether the mechanism of injury is consistent with causing the injury sustained; and

[iii] Whether the specialist who examined the claimant is supportive of a traumatic cause of the condition.¹⁵

[50] It is submitted that there is a compelling temporal link in Mr Singh's case. Prior to his injury in 2013, Mr Singh had never suffered any problems with his lower back. He had immediate onset of lower back pain and felt a crack in his lower back at the time. The symptoms included pain down his right leg.

[51] Another important consideration is whether the mechanism is consistent with causing the injury. Mr Choy noted that Mr Singh had a clear lifting injury of substantial weight. He felt that the mechanism likely caused an acute disc injury

¹³ *O'Connor v Accident Compensation Corporation* [2015] NZACC 118.

¹⁴ *Smith v Accident Compensation Corporation* [2004] NZACC 255.

¹⁵ *Pentecost v Accident Compensation Corporation* [2018] NZACC 92.

certainly at the L5/S1 level. Mr Leigh commented that a box of lemons weighing 10 – 20 kg is a significant enough weight to cause damage to the disc.

[52] Mr Pai has not provided any specific analysis of the mechanism of the injury. Neither has Dr Fong, simply citing the presence of other pathology in support of an assertion that the accident did not cause the disk protrusion.

[53] Mr Choy was the treating specialist and he supports there was a causal link. Mr Leigh noted Mr Singh's age and he thought he had a traumatic injury consistent with causing a disc protrusion. Both are spinal surgeons and the consensus between the two is compelling evidence of a causal link in this case.

[54] In terms of the phrase “wholly or substantially caused by non-injury factors”, in *Duncan v Accident Compensation Corporation*¹⁶ the Court referred to the case *Treloar* (see para [37] above).

[55] In relation to Mr Pai's opinion, he has asserted that Mr Singh's pathology pre-existed the 2013 accident. He has referenced general statistics which establish no more than the kind of pathology at issue, in this case, can occur in the absence of trauma. While that may be the case, such pathology can also be caused by trauma. Mr Pai and Dr Fong should have considered the impact of Mr Singh's accident and provided reasoning as to why the accident had no part to play. No such reasoning has been provided. Such an approach was criticised by Judge Beattie in *Ballagh* where His Honour said, in relation to a disc prolapse which was said to have occurred naturally consequent upon degeneration that is was:

... far too simplistic as he does not seem to recognise that disc protrusion can be caused as a consequence of trauma, and I reject the suggestion that such injuries can only arise from non-traumatic causes.

[56] In *Black*, Judge Joyce, QC, said:

CAP relies very much on the literature ... and pays no great attention to the fact ... that here there was a distinctly dramatic (and consequentially traumatic) accident event.

¹⁶ *Duncan v Accident Compensation Corporation* [2000] NZACC 311 (17 November 2000).

[57] Dr Fong refers to an article he referenced as “High Prevalence of Spinal MRI in Findings Asymptomatic Young Adults” which he cited in support of his opinion that similar findings were prevalent in the asymptomatic population in Mr Singh’s demographic. The article is actually entitled “High Prevalence of Spinal Magnetic Resonance Imaging Findings in Asymptomatic Young Adults (18 – 22 years) Candidate to Air Force Flight”. This was performed during cadet’s selection procedures of the Italian Air Force Academy. Interestingly, only 10% of the 350 asymptomatic subjects studied presented with a disc protrusion. This was not a compelling statistic, particularly when considered against Mr Singh’s specific circumstances.

[58] Both Mr Choy and Mr Leigh acknowledge that pre-existing pathology may have been present at the time. But Mr Choy felt that it would be reasonable to attribute a substantial portion of Mr Singh’s symptoms and MRI findings to his 2013 accident. Mr Leigh similarly considered the 2013 accident caused the disc protrusion and as such, that Mr Singh’s condition was not wholly or substantially due to any pre-existing changes. It is therefore submitted that it cannot be said that Mr Singh’s injury was caused wholly or substantially by gradual process disease or infection and that cover is not precluded by the exception in s 26(2).

[59] In this case Mr Choy and Mr Leigh are independent practising orthopaedic spinal surgeons who have assessed Mr Singh personally. Neither Dr Pai or Mr Fong had done so.

[60] It is submitted that this is the most persuasive evidence in support of Mr Singh’s L5/S1 disc protrusion due to his 2013 accident and the revocation decision should be overturned.

Submissions for the respondent

[61] Section 20 of the Act defines the principles for cover for personal injury. The injury must be caused by an accident to the person. Accident in s 25 is defined as a specific event or series of events, other than a gradual process, that involves the application of force or resistance external to the human body. Section 25(3) makes it clear that the fact a person has suffered a personal injury does not mean that personal

injury was caused by an accident. Section 26 of the Act provides that personal injury does not include personal injury caused wholly or substantially by a gradual process disease or infection. In *Cochrane v Accident Compensation Corporation*¹⁷ found that an appellant may not establish causation by showing the injury triggered an underlying condition to which the person was already vulnerable. Or that the injury accelerated the condition that would have been suffered anyway. The question is simply whether the necessary causal nexus continues to exist between the injury and the condition.

[62] The appellant bears the onus of proof and in discharging that onus is not entitled to the benefit of the doubt. The risk of causation is not sufficient. As the High Court found in *Cochrane* and *Johnston*,¹⁸ if the appellant had an asymptomatic pre-existing degenerative disease that was rendered symptomatic or accelerated by the 9 January 2013 lifting event he is not entitled to cover.

[63] While a temporal connection is a relevant consideration, it is not sufficient to establish causation. In *De Marigny v Accident Compensation Corporation*¹⁹ Judge Sinclair observed:

The central issue in this case is causation. While there is a clear temporal link between the injury event and onset of pain, which is emphasised by Mr Boyle, Dr Harding and Dr Hurly that is not sufficient on its own to establish causation. There needs to be medical evidence to support such a finding.

[64] In *Standing*,²⁰ Judge Henare made a similar statement and said that a temporal link on its own it not determinative of causation.

[65] Mr Choy's consideration of the mechanism as characterised by mere assertion of causation based almost entirely on a temporal link and speculations. It is submitted that there is no compelling analysis which explains how lifting a box of lemons could have caused an acute L5/S1 disc protrusion. Neither Mr Choy, nor Mr Leigh have provided any detailed explanation of how the disc would be damaged in that sort of movement. He states that the mechanism of injury as recorded in 2013

¹⁷ *Cochrane v Accident Compensation Corporation* [2005] NZAR 93.

¹⁸ *Johnston v Accident Compensation Corporation* [2010] NZAR 673.

¹⁹ *DeMarigny v Accident Compensation Corporation* [2020] NZACC 77 at [35].

²⁰ *Standing v Accident Compensation Corporation* [2018] NZACC 40.

was lifting a box of lemons. Mr Leigh went on to say that a weight of 10 – 20kg is a significant enough weight to cause damage to the discs. It is submitted that this is nothing more than an expression of the possibility of causation, rather than an explanation of how lifting the box of lemons caused the L5/S1 disc protrusion. There is no analysis of the mechanism.

[66] By contrast, both Mr Pai and Dr Fong have considered the mechanism of injury and explained that a single event of lifting a box of lemons would not be sufficient to cause an acute L5/S1 disc protrusion. Mr Pai opined that what happened in 2013 was an aggravation of pre-existing spondylosis of Mr Singh's lumbar spine without causing any acute new structural changes. Where there is a degenerative disc it is not uncommon to present with disc bulge/protrusion, herniation, annular tears or discogenic pain, even following a trivial event or injury, or even spontaneously. He considered that the 2013 lifting event. He considered that the 2013 event resulted on a precipitation of symptoms which was an aggravating of a pre-existing asymptomatic degenerative L5/S1 and L4/5 discs.

[67] Dr Fong had the benefit of all the available medical evidence when he provided an opinion. With that information, Dr Fong explained he did not consider a single event of lifting a box of lemons weighing between 10 and 20 kgs was sufficient to cause a L5/S1 disc protrusion.

[68] On 15 November 2018, Mr Pai provided an addendum to his earlier report and said that neither the 2013 nor 2018 events were the cause of Mr Singh's symptoms. Mr Pai stated:

“In my opinion, there is no doubt in my mind that the underlying diagnosis of lumbar spondylosis predated and was present before 2013, and in 2013 he more than likely had an aggravation, and in 2018 he had an exacerbation. However, subjectively, his symptoms are persisting and in such a situation when symptoms are present there on 6 months it is more than likely he requires cognitive behaviour treatment and looking for alternative work as it is well known that in the presence of such changes in the lumbar spine labour and work can precipitate back symptoms.

In my opinion, his present symptoms are related to his underlying lumbar spine spondylosis with some psychosocial elements.

[69] On 30 November 2019 Dr Clifton, said she agreed with Mr Pai's analysis and conclusions, being that multi-level changes identified in 2013, including the L5/S1 disc protrusion predated the 2013 accident. Disc herniation arose as part of Mr Singh's age related degenerative changes which begin in the early 20s and increases with age. The onset of symptoms does not necessarily equate to the occurrence of the new structural abnormality as disc abnormalities often present asymptomatic people.

[70] On 20 May 2020 Mr Fong provided a comment on behalf of CAP. Dr Fong advised that in his opinion Mr Singh's L5/S1 disc protrusion was degenerative in nature due to multi-level disc disease. He said degenerative disc disease with disc bulging and disc protrusion and disc extrusion is highly prevalent in the asymptomatic population. In this case, the x-ray and MRI findings in 2013 are clear evidence of established multi-level degenerative disc disease at L4/L5 and L5/S1 in the lumbar spine at the time of the accident. In the presence of non-degenerative disc disease, this is part of the post degenerative process and not caused by a single episode of trauma, and not caused by picking up a box of 10/20kg of lemons.

[71] The respondent submitted that the central issue for the Court to determine is whether Mr Singh's L5/S1 disc protrusion was:

- [i] Wholly or substantially caused by an underlying and pre-existing degenerative process, rendered symptomatic by lifting a box of lemons on 9 January 2013; or
- [ii] Caused by lifting a box of lemons on 9 January 2013.

[72] The appellant bears the onus of proof.

[73] The contest of the medical evidence essentially between Mr Choy and Mr Leigh on one hand and Dr Pai and Mr Fong on the other, supported by Drs Millar-Coote and Clifton. It is submitted that the weight of the specialists' medical evidence supports the ACC's decision declining cover for the appellant's L5/S1 disc protrusion.

[74] There is no dispute among the medical specialists that Mr Singh had some pre-existing multi-level degenerative changes in the lumbar spine. It is submitted that when all the evidence is considered, the analysis of Mr Pai and Dr Fong should be preferred to that of Mr Leigh and Mr Choy for the following reasons:

- [i] Mr Pai and Dr Fong are highly qualified orthopaedic surgeons with experience in providing comment in the Accident Compensation jurisdiction. While the appellant's submissions refer to the claim being of a complex spinal nature, none of the medical specialists have characterised the claim in that way, or expressed a view that only a spinal surgeons is qualified to comment.
- [ii] Although Mr Choy and Mr Leigh agree there is some causal link between the lifting event and the pathology, when the evidence is carefully considered, it is far from compelling.
- [iii] Mr Choy's reasoning is not persuasive. It is based entirely upon the flawed reliance on a temporal link and improperly giving the appellant the benefit of doubt. It is also inconsistent with an earlier opinion that the appellant's symptoms were caused by the 2018 lifting event.²¹

[75] Mr Leigh's evidence is

- [i] overly reliant on the temporal link;
- [ii] does not give any detailed explanation on the mechanism of injury and how that could have led to a traumatic L5/S1 tear.
- [iii] does not justify why he considers the lifting events substantially contributed to the 2013 MRI pathology when he accepts that multi-level degeneration was already present.

[76] By contrast, Mr Pai's analysis is the most comprehensive and well reasoned of all the specialists. Mr Pai emphasises:

²¹ In his May 2018 report, Mr Choy advised the appellant's pathology was caused by the February 2018 lifting event.

- [i] He has carefully considered all the available medical evidence and explained his opinion about causation in detail.
- [ii] Justified his opinion rather than relying heavily on the temporal connection;
- [iii] Explained why he thought the 2013 MRI findings were degenerative in nature rather than caused by the lifting event.
- [iv] Explained in detail that Mr Singh's condition over time, including his periodic aggravations in 2013 and 2018 after lifting events, treatments have not been successful. This demonstrates an underlying degenerative condition rendered symptomatic from time to time.
- [v] Had the benefit of assessing Mr Singh in person, unlike Mr Leigh whose assessment was via tele-health only.

[77] Counsel submits that the criticisms of Dr Fong are unjustified. He had all the available evidence and has considerable experience as an orthopaedic surgeon when he expressed his opinion on causation. Dr Fong's view on causation is based on all the evidence, including the temporal link, his assessment of the mechanism of injury, the radiological evidence and Mr Singh's age.

[78] The respondent submits that ACC's decision revoking deemed cover and declining cover for the L5/S1 disc protrusion are correct and should be upheld. The appeal should be dismissed.

Analysis and Discussion

[79] The issue in this case comes down to whether the disc protrusion at L5/S1 was caused by the 9 January 2013 lifting incident or whether this already existed at the time of the lifting incident. In the absence of a prior MRI, the case falls to be decided by the competing evidence of the medical opinions

[80] Mr Choy did not treat Mr Singh for the 2013 lifting injury. He saw him after the 2018 reinjury. At that time Mr Choy said that he thought that the disc bulge was

impinging on his L5 nerve root and that this was likely the source of Mr Singh's symptoms. Mr Choy was sent information about the 2013 injury and MRI scan and provided comment to Mr Singh's lawyers in a letter dated 10 June 2019. Specifically, he was asked if there was a causal link between Mr Singh's 9 January 2013 accident and his current lumbar spine condition. He noted the MRI scan demonstrating a degree of disc protrusion at L5/S1. He also had a degree of discogenic disease at 4/5 and 5/1 with evidence of an annular tear. In an earlier letter to ACC dated 27 June 2018, Mr Choy said he did not believe the annular tears are from his current injury (2018 injury). He agreed that the two MRI scans were similar.

[81] In answer to the specific question referred to in the preceding paragraph Mr Choy referred to the following factors as supporting that there was a causal connection.

- [i] Mr Singh had a clear lifting injury of a substantial weight which led to immediate back pain and a degree of right sided radiculopathy;
- [ii] On imaging there was a degree of disc protrusion at L5/S1 which did settle in 2013 with a steroid injection;
- [iii] Given the onset of symptoms the lifting incident had contributed significantly to his symptoms, he was symptomatic prior to this; and
- [iv] His relatively young age at the time (37 years).

[82] Mr Leigh also considered there was a causal link between Mr Singh's condition and the 2013 accident as follows.

- [i] Prior to 2013, Mr Singh did not have any problems with his back;
- [ii] There was a clear lifting injury. 10-20kgs is a significant enough weight to cause damage to the disc;
- [iii] There was evidence of a disc protrusion which caused classical sciatica;

[iv] Treatment with a steroid injection indicates an injury with resolution; and

[v] Mr Singh was only 37 years of age at the time.

Mr Leigh agreed that there was some discogenic change prior to the injury at 2013.

[83] Dr Pai was of the view that the injury in 2013 did not cause Mr Singh's symptoms of back and leg pain. His opinion was that the 2018 injury was more than likely an aggravation from the event in 2013, in the context of underlying pre-existing spondylosis of his lumbar spine without causing any structural change. He was of the view that his pathology cannot be explained by the 2013 lifting event in his brother's shop. The MRI findings predate this. The 2013 event resulted in precipitation of symptoms which is an aggravation of pre-existing asymptomatic degenerative L4/L5 L5/S1 disc. In 2018 he had an exacerbation.

[84] Mr Fong said that in the presence of known degenerative disc disease with degenerative disc protrusion, degenerative disc extrusion is highly prevalent in asymptomatic population of his demographics. In this regard Dr Fong referred to the study in air force cadets that counsel for the appellant had referred to. There was no need for trauma for disc degenerative disc bulge to occur.

[85] Mr Singh had two levels of reduced disc height which all the doctors agree shows some degenerative change. Disc protrusion can be caused by degeneration and by trauma. Dr Pai and Dr Fong say that Mr Singh's L5/S1 disc protrusion was caused by the degenerative process already evident in his spine. Drs Choy and Leigh say that the 2013 lifting event was enough to cause it.

[86] I accept the opinion of Drs Choy and Leigh. My reasons for doing so include the temporal link and the fact that Mr Singh was asymptomatic prior to 2013. Added to that is that Mr Singh was relatively young at the time, 37 years of age.

[87] An issue raised by counsel for ACC is that neither Dr Choy nor Dr Leigh had adequately explained the mechanism of the injury other than lifting the box of lemons is enough. The review hearing transcript contains Mr Singh's explanation of

what occurred. First, he settles the issue of the weight by explaining the box of lemons weighed 20kgs. He refers to other boxes as weighing less, for example a box of broccoli. He had taken a trolley of boxes of produce into the chiller. He was lifting the box of lemons to place it in the chiller when he felt the pain his back. That is the best explanation I have.

[88] Dr Leigh is clear that lifting a weight of 20kgs is enough to cause damage to the disc. Mr Choy says with his lifting injury he has had an acute disc injury. I accept the explanation of both surgeons, including because they are both spinal surgeons.

[89] I agree with counsel for the appellant that a study of 18 – 22 year olds which showed only 10% had disc protrusion in asymptomatic person is of little value to ACC in this case. Except to say that the percentage figure of 10% would tend to favour Mr Singh's case rather than that of ACC.

[90] I do not accept that the L5/S1 disc bulge is part of a degenerative process when the circumstances of the accident, the immediate symptoms of pain, the fact Mr Singh had never suffered low back pain prior to this and his age are taken into account.

[91] I accept the medical evidence of Drs Choy and Leigh that the disc protrusion at Mr Singh's L5/S1 was caused by the 2013 lifting event and is not wholly or substantially caused by degenerative processes.

[92] It follows that Mr Singh should have cover for his L5/S1 discogenic back pain and radiculopathy as confirmed by the nerve conduction studies. ACC is to provide cover for this. The Review decision is quashed as is ACC's decision to revoke deemed cover.

Costs

[93] Mr Singh has been successful and he is entitled to costs. If counsel are unable to settle the issue of costs, memoranda may be filed.

A handwritten signature in blue ink, appearing to read "P. A. Cunningham". The signature is written in a cursive, flowing style.

Judge PA Cunningham
District Court Judge

Solicitors: John Miller Law, Wellington, for the appellant
Ford Sumner, Wellington, for the respondent