IN THE DISTRICT COURT AT WELLINGTON

I TE KŌTI-Ā-ROHE KI TE WHANGANUI-A-TARA

[2023] NZACC 023 ACR 37/17 ACR 119/21

UNDER THE ACCIDENT COMPENSATION ACT 2001

IN THE MATTER OF AN APPEAL UNDER SECTION 149 OF THE ACT

BETWEEN CRAIG BROWN

Appellant

AND ACCIDENT COMPENSATION CORPORATION

Respondent

Hearing: 21 December 2022

Heard at: Dunedin/Ōtepoti

Appearances: Mr P Sara for the Appellant

Mr I Hunt for the Respondent

Judgment: 13 February 2023

RESERVED JUDGMENT OF JUDGE C J MCGUIRE [Cover Issues, Part 2, Accident Compensation Act 2001]

- [1] The decision under challenge in respect of appeal ACR 37/17 is dated 29 September 2015, declining cover for a disc protrusion injury and also a request submitted by Mr Bruce Hodgson, orthopaedic surgeon, on behalf of the appellant for elective surgery funding.
- [2] In respect of appeal ACR 119/21, this is an appeal against a decision of ACC on 21 April 2020 declining cover for L4/5 disc protrusion.
- [3] The parties agree that the central issue is whether the appellant is entitled to cover for an L4/5 disc protrusion and nerve root compression.

Background

- [4] The appellant is presently aged 56 and has been engaged as a builder since 1982.
- [5] On 25 October 2010, the appellant then aged 44, was at home digging a hole for a fence post, which, when it had been dug was 450mm x 450mm and 600mm deep.
- [6] The appellant deposed that he was clearing out some loose material from the bottom of the hole, which he described as clay and "gravel-type stuff". As he lifted the spade out of the hole and twisted the spade over, he experienced very severe pain in his lower back.
- [7] He described that he got stuck in the bent over position he had adopted to clear the hole and slowly made his way inside the house and called an ambulance.
- [8] The Saint John Ambulance patient report form records "shovelled cement". It also records "felt something go in lumbar spine".
- [9] There is also reference to pins and needles down L leg, "which has cleared". The report also noted that the appellant was slowly able to mobilise.
- [10] The emergency department record of 25 October 2010 records that the appellant twisted his back at work. A back sprain was diagnosed. He was given analgesics and advised to come back if symptoms got worse.
- [11] The emergency department triage record recorded:

Working and twisted back, felt something give, had some pins and needles. Walked into dept in discomfort, given panadol and brufen on arrival.

[12] There is an x-ray report dated 28 October 2010, includes the following:

History of back injury as well. Now has pain lower back as well as on left side of spine.

Report: there is mild scoliosis present, convex to the right. Vertebral body heights are well preserved. Mild disc space narrowing seen at L4/5 with associated mild osteo fight formation. Osteophytes are also seen at the L3/4 disc level. Further osteophytes are seen at the T11/12 disc level ...

[13] The appellant was referred to Mr Hodgson, orthopaedic surgeon, who reported on 14 April 2011:

He injured his back on 25 October 2010 while shovelling gravel, developing quite significant back pain that was sufficient for him to attend the A&E department at Kew Hospital.

٠..

He has continued to suffer from niggly discomfort in his back, worse when standing for lengths of time, sitting, work in a bent position, but also waking him from sleep when he rolls over.

. . .

Throughout this period he has not had sciatic symptoms in his legs, nor for that matter has there been anything in the way of paraesthesia or numbness. He did find on one occasion while putting a heavy window into a frame that his legs almost gave way and felt quite jelly-like.

...

He has had niggles in his back for the past 2-3 years, usually episodes of discomfort that would settle with movement, but he has not been aware of any significant injuries over the past.

. . .

His plane x-rays of the lumbar spine have shown reasonably normal findings, apart from perhaps a mild retrolisthesis of L4 on 5, with some narrowing of the disc spaces here. The sacroiliac joints look normal.

I am suspicious Craig has mechanical pain on the basis of changes at the L4/5 level and am going to arrange for an MRI scan now at Kew Hospital.

[14] An MRI lumbar spine scan was carried out on 28 April 2011. The report records:

At L4/5 there is minor disc bulge, but no significant thecal sac nor nerve root compression.

[15] Mr Hodgson referred the appellant to Dr Bentley, musculoskeletal physician, who reported on 26 January 2012, under the heading "History":

Craig has had low back pain for many years, pain has been brought on with various physical activity in the past. On 25/10/2010, he was digging a post hole and felt acute low back pain, his back seized up, he couldn't straighten from a flexed position, couldn't move. He was taken by ambulance to Southland Hospital, where he was assessed ...

Assessment Summary

Craig is a 45 year old self-employed builder who has chronic persistent low back pain, he is able to do most usual physical tasks in his work as a builder, he has no leg symptoms.

Craig has internal disc disruption at L2/3, L3/4 and L4/5, he has in my opinion suffered recurrent lumbar disc sprain injury, most recently 25/10/2010, he has impaired dynamic spinal stability, which results in increased compression load of the lumbar discs during flexion and increased tension in the lumbar paravertebral muscles during flexion, perpetuating back pain. There is tension in iliopsoas, the paravertebral muscles and weakness of gluteus medius, all potentially contributing to his back pain. The chronic lumbar spine disfunction results in impaired mobility of the thoracic spine and impaired postural spinal function, not surprisingly he has developed mid-cervical neck pain.

[16] Dr Bentley reported again on 5 April 2012 and said:

I reassessed Craig today, he is a 45 year old self employed builder who has chronic persistent low back pain, with recurrent back strain episodes, his back pain has been worse since he strained his back digging a post hole in October 2010. He has been able to do most usual physical tasks in his work as a builder, he has no leg symptoms. Wearing a nail bag aggravates back pain. Craig has MRI evidence of internal disc disruption of L2/3, L3/4 and L4/5. I initially assessed Craig on 26/1/2012. He has in my opinion suffered recurrent lumbar disc sprain injury, he has impaired dynamic spinal stability, tension in iliopsoas, the paravertebral muscles and weakness of gluteus medias, all potentially contributing to his back pain.

- [17] In 2015, the appellant was referred back to Mr Hodgson by his GP.
- [18] In his report of 28 April 2015, Mr Hodgson said:
 - ... I last saw him in 2012. He has continued to suffer from quite significant mechanical pain, generally without sciatica as such, though occasionally he gets some funny feelings of numbness in his buttocks and thighs.
- [19] Mr Hodgson arranged for a further MRI scan.
- [20] Mr Hodgson reported on the MRI scan on 29 May 2015:
 - ... His MR scan at Kew Hospital on 12 May 2015 has shown a mild annular tear on the right side at L4/5, with some collapse of this disc and mild narrowing of the foramina.
- [21] Mr Hodgson arranged for the appellant to have a CT discogram at L4/5. This occurred on 24 July 2015.
- [22] Under the heading "Findings", Dr Fulton said:
 - ... There is a small extension above the disc, behind the vertebral body of L4. The extravasation does not appear to follow the track of the needle.

There is some mild left paracentral disc bulge also.

- [23] On 28 July 2015, Mr Hodgson submitted an Assessment Report and Treatment Plan seeking ACC funding to carry out a posterior L4/5 discectomy, interbody fusion and inter transverse fusion with instrumentation.
- [24] In accordance with ACC usual practice, an opinion from its clinical advisor was sought. It was provided by Peter Hunter, orthopaedic specialist, on 29 September 2015. Mr Hunter found that a causal link to fund spinal fusion surgery at L4/5 to an ACC covered "injury cannot be established on the information available."
- [25] Following ACC's decision to decline both cover and elective surgery funding, on 9 March 2016, Mr Brown went ahead with the surgery.
- [26] On 18 March 2016, Mr Hodgson provided a full report to Mr Sara which included the following:

Summary

Mr Brown has suffered an injury to his back on 25 October 2010 while shovelling gravel, this being severe enough to cause significant pain and require him to attend the A&E department at Kew Hospital in Invercargill. He was seen, examined and on the basis of findings, treated with analysics and subsequently discharged.

Mr Brown has continued to suffer from ongoing mechanical pain related to the original problem, which over the years has not settled with a variety of conservative and non-operative treatments. Despite intensive physical reconditioning, he has continued to suffer from ongoing mechanical pain, which has eventually required surgical intervention.

At surgery, it has been noted that the disc protrusion as outlined in the recent MR scan and discogram has been confirmed with a discoctomy being carried out to free the nerves that were irritated (fusion has been carried out as well).

Opinion

Mr Brown has suffered a significant torsional injury to his back while in a bent position shovelling gravel. This has caused damage to the L4/5 disc as outlined in the original clinical notes.

Plain x-rays at the time have revealed narrowing of the disc space, however over the following five years the disc space has narrowed further, the presence of an annular tear has become apparent on serial MRI scans and this has been confirmed with a CT discogram carried out in 2015.

The disc protrusion as confirmed on MR scanning, CT discogram, has been confirmed operatively at his surgery on 9 March 2016.

In my opinion, the original tear of the annulus at the L4/5 disc on the right hand side has occurred on 25 October 2010, however has been of a minor nature and has not been apparent on the x-rays available at that time, or the MRI scan available at that time.

This does not imply that the disc protrusion was not there, it merely means that it was invisible on the imaging available at the time.

The more sophisticated imaging present in 2015 allowed an accurate identification of the pathology that was causing the ongoing pain in Mr Brown's back that has been present since the original accident and lead to the need for his surgical intervention.

Mr Brown has evidence of a change in other discs throughout the lumbar spine, but none of these required particular intervention.

The reason for intervention at L4/5 is the presence of the right-sided L4/5 disc protrusion and annular tear as confirmed on the most recent MR scan in 2015 and indeed the CT discogram. This has also been confirmed by the surgical findings on 9 March 2016.

In my opinion, the initial torsional force applied while in a bent position shovelling gravel has lead to the onset of the annular tear that has driven his mechanical back pain that has lead to the attendance at the A&E department at Kew Hospital in Invercargill. It has subsequently not settled and required ongoing intervention and treatment, both of a conservative management with medications and also a formal functional rehabilitation programme.

Unfortunately, the post traumatic degenerative process has continued in the disc, which is well known and this has lead to ongoing functional instability, the mechanical instability and the need for surgical intervention.

The direct need for surgical intervention relates back to the original injury on 25 October 2010.

[27] ACC sought further comment from Mr Hunter, who commented:

... The MRI report of 28/04/2011, six months after the injury, is fully detailed and describes disc building at three levels and no focal protrusion.

The scan on 12/05/2015 seems to have been done on the same scanner at Southland Hospital. The report is less detailed.

It seems unlikely, to say the least, that a disc protrusion was missed on the first scan. The covered injury is "pain in the lumbar spine" without evidence of a disc protrusion in the clinical history.

[3] Does the available information support any of the pathology treated at surgery, as most likely having been caused in the 25/10/2010 accident event? If not, explain why/why not.

The pathology treated was degenerative disc disease, gradual process pathology not caused by a single event injury. Investigation of the injury revealed the pre-existing and underlying disc disorder.

[28] Mr Hodgson responded on 3 May 2016:

I am surprised by Mr Hunter's reference to my operation note not indicating a specific disc prolapse at L4/5, when in fact I had noted it at surgery and had informed Mr Brown of the fact post-operatively.

I have reviewed my operation notes and can see there have been a number of typographical errors that have lead to the misunderstanding.

In particular, paragraph 2, sentence 2 should read "There was <u>an</u> obvious protrusion of the L4/5 disc", not as you and ACC received "There was <u>no</u> obvious protrusion".

I apologise for this clerical error. I am sorry that it has lead to such confusion.

The findings at surgery were such that I informed Mr Brown in the days after his surgery that in my opinion, the disc prolapse at L4/5 had occurred at the time of his injury and the need for surgery was directly related to that.

Mr Hunter makes note of the degenerative disc disease present at three levels as noted in an MRI scan on 28 February 2011, six months after the injury (25 October 2010).

As I have stated in my letter, I accept that there are changes of wear (degeneration) in Mr Brown's plain x-rays, however the pathology that occurred at the time of his accident related specifically to the L4/5 disc, namely the protrusion on the right-hand side, compressing the L4 nerve root laterally and L5 nerve root medially, this confirmed on clinical evaluation, on the MRI scan, but specifically on the CT discogram and noted at the time of surgery.

The reason for his surgery was to proceed to deal with the disc protrusion and problem related to the L4/5 level as confirmed pre-operatively ...

In particular, the accident on 25 October 2010 has lead to the disc protrusion at L4/5 which has not settled over time. This has lead to ongoing symptoms and disability. Subsequent investigations, including repeat MR scanning and in particular CT discography has confirmed the disc protrusion. This has been confirmed at the time of surgery, from which Mr Brown is making a satisfactory recovery.

- [29] A review hearing took place in Invercargill on 11 May 2016. By decision dated 8 June 2016, the reviewer, JG Greene, quashed ACC's decision and directed that further evidence be obtained and for the decision to be made again.
- [30] The reviewer also directed that ACC make further enquiries of Mr Hodgson.
- [31] After this occurred Mr Hodgson replied by letter dated 22 June 2016:

Mr Brown's disc prolapse has been treated by indirect compression with the wide undercutting facetectomies as outlined.

This has lead to a reduction of pressure on the dural sac and nerve roots as a result of these being freed posteriorly. The disc prolapse is no longer jamming them in the

confined canal. They now have more room to be free. The reason that the decompression alone has lead to the reduction in symptoms is the disc is no longer jamming them against the overlying structures.

. . .

The reviewer should understand that in view of the fact I could **not** carry the discectomy, this required the need for the wide decompression (undercutting facetectomies and wide decompression) of the nerve root to allow them to be free and float off the back of the disc such that they were no longer compressed against the overlying structures (lamina, ligamentum flavum).

This is the reason that his symptoms have resolved.

The disc protrusion at L4/5 was present as a result of the post traumatic event that occurred following his injury on 25 October 2010.

- [32] Next, ACC sought a review of the MRI scans of 28/4/11, 12/5/15 and the x-rays of 20/8/14 and 9/3/16.
- [33] In his report of 1 August 2016, Dr reeves said:

The MRI scan of 28/4/11 shows lumbar vertebral bodies of normal height.

. . .

The L4/5 disc shows mild loss of height and signal intensity with minimal bulging of the disc. The facet joints show mild hypotrophy. The central canal and foramina appear normal. No annular tears of the disc are shown.

. . .

ACC Review of Film Lumbar Spine – 1 August 2016

. . .

The L4/5 disc shows mild loss of height and signal intensity with mild bulging. The facet joints show mild hypertrophy and there is a small synovial cyst arising from the medial aspect of the right facet joint. The central canal is well preserved. There is a small right foraminal disc bulge and annular tear. The left foramen appears normal.

. . .

In regards to the question, there is suggestion that some minimal annular bulging of the L4/5 disc in the right and left foraminal region. The left foraminal annular tear is visible on both scans, as is the right foraminal annular tear.

- [34] ACC issued its decision again on 12 September 2016, declining elective surgery funding.
- [35] A further review application was filed by the appellant.

[36] Mr Hodgson provided a further report dated 28 September 2016.

[37] Mr Hodgson said:

I have read the reports by Dr Quentin Reeves and the report by Mr Peter Hunter for the CAP for ACC.

It appears Dr Reeves' review of the MRI scans and x-rays did not include the CT discogram carried out by Dr James Fulton of Otago Radiology.

. . .

You will note from my original report that Dr James Fulton, Radiologist, carried out a CT discogram of Mr Brown's lumbar spine on 24 July 2015, noting a right paracentral disc protrusion with extension of contrast behind the L4 vertebra. He noted the patient's pain increased significantly when the patient sat up.

You will also note that at surgery I confirmed the disc protrusion on the right hand side abutting the thecal sac and particularly the L4 nerve root laterally and the L5 root medially, causing compression.

. . .

I find it rather surprising that a decision has been made by the ACC relating to a report by a radiologist not in receipt of all the radiologic findings or tests, and secondly, that an orthopaedic surgeon writing for the ACC has made a decision based on insufficient and inadequate information related directly to radiologic findings without any reference to surgical findings, which clearly state the operative finding and the cause of Mr Brown's symptoms.

- [38] The appellant's review application was dismissed on 16 December 2016 and an appeal was lodged.
- [39] On 21 February 2017, Mr Hodgson provided a further opinion that concluded with this summary:

In my opinion, Mr Brown has suffered the injuries as outlined in 2010 and 2011 and with the post traumatic collapse and change within the disc that has lead to a full-blown prolapse as noted on MR scanning in 2015, subsequent deterioration on clinical grounds, with lack of response to non-operative measures, such that he has become disabled and required surgery in 2016.

The surgery has confirmed the changes at the disc and the need for surgery related to the changes at the disc directly.

[40] On 3 October 2017, the respondent's clinical advisory panel, that consisted of Mr Hunter; Ms Rasmussen, physiotherapist; Dr Medlicott, orthopaedic surgeon; and

Dr Murphy, sports medicine specialist, disagreed that the accident in 2010 initiated a degenerative process at the L4/5 disc, for which surgery was performed in 2016.

[41] The panel's reasoning was as follows:

- It was possible for the accident event to cause a disc injury, but the other evidence does not support this.
- The x-ray three days later reported mild disc space narrowing at L4/5 indicating that the client already had signs of disc and bony degeneration at the L4/5 level.
- The appellant had mechanical back pain, but no radicular or sciatic symptoms in keeping with an acute disc protrusion.
- The appellant had a two or three year history of back pain that pre-dated the 2010 accident, without any history of significant accidents.
- The MRI scan in 2011 reported disc bulges affecting L2 to L5 discs and this is evidence of long standing multi-level disc disease.
- The x-rays on 20/08/2014 reported similar findings to the x-ray in 2010.
- The further MRI on 12/05/2015 reported dehydration of the lower four lumbar discs ... these changes also reflect multi-level lumbar disc disease that appears to be on the basis of a gradual process. There is no evidence of single episode traumatic pathology.
- The CT discogram on 24/07/2015 reported right paracentral and lateral contrast extravasation consistent with a disc prolapse at L4/5. Those findings are not typical of a traumatic protrusion.
- As to the extensive network of epidural veins, making access to the disc difficult
 at L4/5, the panel said these findings do not assist in the determination of the
 cause of disc pathology, given the time between the date of accident and date of
 operation.
- The fusion procedure as was performed in this case is more often required to address a degenerative disc.

- In the view of the panel, the imaging does not support a traumatic physical injury to the L4/5 disc that is any different to underlying disc disease that has progressed over time.
- [42] In a reply dated 28 June 2019, Mr Hodgson responded to the clinical advisory panel's comments.
- [43] He notes that the panel has acknowledged that the mechanism of accident on 25 October 2010 could have caused a disc injury.
- [44] Mr Hodgson says that narrowing of disc space is a common finding in the lumbar spine of a 52 year old man. He says:

Therefore, the plane x-rays are of limited value when looked at by themselves, just as an MRI scan is. Taking one imaging modality as a way of determining the problem and cause is not sensible or appropriate.

It is important to focus on the patient's history, clinical examination, plane x-rays, MRI scan and CT discogram, as well as the findings at surgery. The more bits of information obtained, the better the change of achieving an adequate understanding and assessment.

A patient may indeed have mechanical back pain from a disc protrusion, but not radicular pain. Radicular pain occurs when the nerve root is compressed or inflamed. Mechanical back pain associated with a disc protrusion is very common. The patient will only get radicular or sciatic symptoms when a particular nerve root is compressed.

I acknowledge Mr Brown had a history of discomfort in his back prior to the 2010 accident. However, while he recovered from these episodes, he did not require any particular intervention. This was not the event that lead to the problem that required surgical intervention.

The MRI scan has not reported a specific disc prolapse, as outlined. These are similar to plain x-ray changes. The fact that they do not show a disc protrusion does not mean it is not there. MRI scans, as I have noted, are somewhere between 90 and 95 per cent accurate. This means there is a 5-10 per cent chance that they are not accurate.

For this reason, a CT discogram was carried out on 24 July 2015. This not only confirmed the presence of the right paracentral disc protrusion, but also in particular lead to reproduction of his symptoms. This is consistent with the clinical symptoms and findings.

In my opinion, it was quite consistent that the L4/5 disc annular tear and protrusion had indeed caused the symptoms he was suffering from.

This was the specific reason why he required surgery. He did not require surgery for other changes in his lumbar spine, only specifically for the acute changes at L4/5. In my opinion, these had occurred as a result of his incident shovelling gravel on 25 October 2010.

...

Of importance, Mr Brown has made a satisfactory recovery from his surgery, with resolution of his sciatica, resolution of his mechanical back pain and has returned to gainful employment as a builder.

- [45] The matter was eventually allocated a hearing in Dunedin on 26 February 2020. Mr Hunt, for the Corporation, submitted that the court did not have jurisdiction to deal with the question of cover, arguing that ACC had never made a decision on cover for the L4/5 disc protrusion.
- [46] Mr Brown was invited to formally seek cover and that was accomplished by Counsel writing to ACC on 3 April 2020. This was a practical concession, only in order to facilitate the resolution of this now very prolonged dispute.
- [47] That application for cover in turn was declined and a further review application was lodged. In a decision dated 10 May 2021, the review application was dismissed. That followed the lodging of the appeal to this court ACR 119/21.
- [48] Further comment was obtained from a clinical advisory panel on behalf of the respondent. Mr Hunter and Dr Murphy were again included, with the remaining members this time being Dr Ray Fong, orthopaedic surgeon, and Sally Gordon, physiotherapist.
- [49] Amongst other things, the CAP stated:

The 25/10/2010 mechanism did not cause a disc prolapse in this case.

The CAP agreed with Mr Hodgson that in general a bending, torsional event as described by Mr Brown on 25/10/2010 – shovelling concrete and/or gravel – can cause a back injury, including a disc prolapse. However, in Mr Brown's case, it did not, because there is no objective evidence of any L4/5 disc prolapse related to that event.

- [50] The panel also said there was no objective evidence of an acute L4/5 disc injury on 25/10/2010.
- [51] The panel also was of the view that the 11/08/2014 mechanism was unlikely to have caused an L4/5 disc prolapse. This was the lifting of windows and doors incident. However, GP Dr Khan's 14/08/2014 records noted physical examination findings of tenderness, a positive slump test and normal neurology.

- [52] The panel said that again, as with the 2010 accident, there were no neurological symptoms to confirm a disc prolapse.
- [53] The panel said that the 12/05/2015 MRI scan reporting dehydration of the lower lumbar discs from L2 to L5. Mr Hodgson and Dr Reeves noted a right L4/5 annular tear, reduction in disc height and foraminal narrowing. The panel said none of these were acute changes and none were causally related to the 2010 or 2014 accidents. The panel said:

The 24/07/2015 CT discogram reported an L4/5 disc prolapse. The CAP noted this was most likely a normal progression of Mr Brown's age related lower lumbar spinal changes. It was unlikely to be causally linked to the 2010 and 2014 accidents, especially with the absence of disc protrusions on the 2011 imaging.

[54] The CAP report concluded:

On balance, the CAP concluded that Mr Brown's history, examination findings, medical records, specialist reports and imaging are most consistent with a natural progression of disc degenerative disease and chronic bony changes.

[55] Mr Hodgson reported again on 15 September 2020 he said this:

The physical injury Mr Brown sustained in 2010 was a rotational, torsional twist to the L4/5 disc, disrupting the lining and interior of the disc, leading to the onset of severe discomfort, secondary to the inflammation caused. This giving rise to mechanical pain.

Fortunately, his symptoms settled over time with conservative, no operative management.

Subsequently, secondary to that incident, he developed post traumatic degeneration and collapse of the L4/5 disc, which then lead to problems in 2015 and required further investigation and in particular surgical intervention.

[56] Mr Hodgson was further critical of the panel's 11 August 2020 report, saying in a further report of 23 October 2020:

The clinical advisory panel group has tried to explain their decision on the one radiologic modality (MRI scan).

In my opinion, their decision is incorrect. It has been based on the fact that one modality of investigation (MRI scanning) has not revealed any "objective evidence".

As I have stated, this is a flawed opinion due to the false negative rate that occurs in MRI scanning.

[57] Mr Sara then addressed enquiry to Dr Harkness of Pacific Radiology. Dr Harkness reviewed the images and said in a report dated 20 August 2021:

[2] The correlation between imaging findings and clinical symptoms (back pain) is poor as supported by the literature. For example:

Even when applying more specific definitions for spine related symptom outcomes, few MRI findings showed large magnitude associations with symptom outcomes. Although incident annular fissures, disc extrusions and nerve root impingement were associated with incident symptom outcomes, the three year incidence of these MRI findings was extremely low, and did not explain the vast majority of incident symptom cases. (Reference provided.)

...

I agree with Mr Hodgson that the overall clinical picture is a better assessment of the patient's problem, rather than radiology in isolation. Depending on the medical problem, radiology may take a larger or smaller role in the clinical picture. As described in the literature, there are radiology findings that are associated with back pain/radiculopathy, but these are not highly sensitive or specific. Usually it is the clinical specialist (ie. orthopaedic surgeon) who evaluates all of the clinical information (history, lab tests, radiology) to arrive at a differential diagnosis. The role of radiology in back pain is to exclude severe conditions such as tumours or infection, and then identify findings that may be correlated with symptoms (annular tear, disc protrusion/extrusion, nerve root impingement). This helps the clinician weight up the likelihood of their diagnosis, bearing in mind the issues with lack of high accuracy for the last category.

Appellant's Submissions

[58] Mr Sara submits that the principal issue in these appeals is the cause of Mr Brown's disc prolapse and his nerve root compression, which this caused.

[59] If that condition was materially caused by the accident event digging a hole, then he is entitled to cover and surgery funding. Conversely, if the L4/5 pathology is part and parcel of age related changes, then cover and ensuing entitlements are excluded because of the provisions of section 26.

[60] Mr Sara refers to *Ambros*¹ which discussed the fact that the legal approach to causation is different from the medical or scientific approach and that this means that a court's assessment of causation can differ from the expert opinion and the court can infer causation from circumstances where an expert cannot.

[61] Mr Sara goes on to say that *Ambros* acknowledges that a court may only draw a valid inference based on facts, supported by the evidence and not on the basis of supposition or conjecture.

Accident Compensation Corporation v Ambros [2007] NZCA 304, [2008] 1 NZLR 340.

- [62] In this case, Mr Hodgson was of the view that the initial torsional force supplied, when Mr Brown was in a bent position digging a hole, has lead to the onset of the annular tear and set up post-traumatic degenerative change, leading ultimately to the need for surgery.
- [63] Mr Sara notes that ACC's advisors were of the view that Mr Brown did not have an L4/5 disc protrusion, but now accepts that Mr Brown did indeed have a disc prolapse at L4/5. This was not present in October 2010.
- [64] Mr Sara says that the panel's focus on multi-level degenerative disc disease, which had apparently progressed over time, is misplaced. Mr Hodgson has never advanced the theory that the whole of Mr Brown's back condition is due to trauma. His focus throughout, and he has been very consistent in this, is that only one area of his back, namely the L4/5 level, due to a disc protrusion, required surgery.
- [65] Mr Sara notes that in relation to the MRI findings from the scan on 12 May 2015, the panel noted Mr Hodgson's findings, but observed:

Again these findings do not necessarily reflect single episode traumatic pathology, as they are just as likely to be present in the absence of a traumatic event.

- [66] Mr Sara submits that this observation can be read another way, which is that these findings do not necessarily reflect an atraumatic degenerative cause.
- [67] Mr Sara notes that Mr Hodgson has explained that a patient may have mechanical back pain from a disc protrusion, but not radicular pain.
- [68] Mr Sara is critical of the panel's view that there was no evidence of a disc injury at L4/5 level from the accident event of October 2010. He says that this is not correct and that what is more correct is that the imaging studies done at that time, limited to x-rays, did not show conclusive evidence of an L4/5 disc protrusion, but as Mr Hodgson points out, this does not necessarily mean that there was no disc injury. The shortcoming is in relation to the limitations of imaging techniques.
- [69] Mr Sara concludes by submitting that probably Mr Brown suffered a disc prolapse as a result of the accident event of 25 October 2010 and that probably the surgery which

Mr Hodgson performed in order to treat the resulting nerve compression was caused by that accident event.

Respondent's Submissions

- [70] Mr Hunt submits that in this case it is not correct to assert that ACC is looking for gross signs of injury. Furthermore, he says that the clinical advisory panel is not just relying on the radiological evidence, nor that it is relying substantially on the radiological evidence.
- [71] He notes that since matters commenced, Mr Hodgson has not taken a consistent approach and has changed his views. He submits that the position that Mr Hodgson has taken has become more and more entrenched as problems are pointed out to him.
- [72] He submits that radiologists are best placed to comment on radiological reports.
- [73] He submits that the clinical advisory panel has properly turned its mind to the issues. The CAP sets out why the appellant has not reached the threshold to satisfy the court that the injury was caused by accident.
- [74] Mr Hunt took the court through each point made in the clinical advisory panel's report of 11 August 2020, including that the appellant's GP, Dr Khan, noted normal neurology.
- [75] He notes that the CAP said that the L4/5 annular tear is not a sign of acute damage. The word "tear" may suggest an acute accident, but that is often not the case.
- [76] He says that Mr Hodgson's criticism of the panel in his report of 23 October 2020, that it tried to explain their decision on the one radiologic modality MRI scan is not correct.
- [77] He says one of the difficulties with Mr Hodgson's opinions is that he does not explain why the appellant suffered a disc prolapse in 2010.

Appellant's Reply

[78] Mr Sara says there is no evidence at all that the disc disorder was present prior to the accident.

[79] He says that while the panel is saying there was no acute disc prolapse, neither too is Mr Hodgson. In essence, Mr Hodgson is saying that the 2010 accident set up the degenerative process in the appellant's back.

Decision

[80] The two bundles of documents in this case chronicle a lengthy "arm wrestle" between Mr Hodgson, orthopaedic surgeon, who operated on the appellant's back and who supports his case, and ACC who was most prominently represented medically by Mr Hunter, orthopaedic surgeon, who was a member of both clinical advisory panels that reported in this case and who also provided clinical comment to ACC on 29 September 2015 as ACC's medical advisor in respect of Mr Hodgson's assessment report and treatment plan.

[81] So, while Mr Hodgson's essential position is that what occurred on 25 October 2010 was a significant injury, that triggered degeneration, Mr Hunter's view, with which the remaining members of two clinical advisory panels agreed, that the disc disorder at L4/5 pre-dates the covered injury "as evidenced on the contemporary x-rays by early disc narrowing at L4/5, which is due to disc degenerative disease and not a single event injury".

[82] The earliest evidence is often very helpful. In this case it was from St John, who attended on the appellant at the venue of his injury on 25 October 2010 and took him to hospital.

[83] The St John report says that the appellant was shovelling cement and felt something go in lumbar spine. The report noted that the appellant had previous history and at the time of the injury, there were some pins and needles down his left leg, which had cleared at the time the officer made the note. The appellant was able to mobilise slowly. The officer noted "lumbar back pain and? disc involvement."

[84] In his evidence at review on 11 May 2016, Mr Brown said:

I was being (bent?) over, lifted the spade out of the hole and twisted the spade over and then I got stuck, I was - I could not move and I was in agony ... I was - I couldn't - I couldn't straighten up. I was stuck in a bent position.

[85] Mr Brown noted that his pain was "15 to 10 ...". He agreed with Mr Sara that it was really, really severe pain.

[86] Mr Brown then said:

I tried to yell out to my wife but she wasn't there, so I just used the spade as a walking stick to get inside, and it took a long time to get inside; and I made it to the couch.

- [87] From there he rang the ambulance.
- [88] He told the reviewer that they did x-rays at the hospital and gave him pain killers and he was discharged. He said as a consequence of that:

I had just had this aching back pain ... it was around 4/5.

- [89] The appellant also said that he had a very high pain threshold and that he had had other back injuries caused by lifting windows or doors, but that this one was different because in the case of the others, the pain went away.
- [90] The emergency department triage record noted this:

Working and twisted back, felt something give, had some pins and needles. Walked into dept in discomfort, given panadol and brufen on arrival.

- [91] In his evidence at review, the appellant went on to say that after he was discharged, the pain level was at around 4/5.
- [92] The appellant described the sharp or severe pain, as Mr Sara put it, not going away and the appellant being referred to Mr Bentley, musculoskeletal surgeon. Mr Brown said that Mr Bentley gave him some exercises and some breathing exercises to do with a big medicine ball. The appellant said it did not help and that as a result he said "I just left it".

[93] The appellant said:

I just got sick of it, I was just over it. I needed to do something about it and that is when I went to see Bruce (Hodgson).

[94] That was when the "arm wrestle" commenced between Mr Hodgson on behalf of the appellant and ACC's medical advisors, notably ACC's principal clinical advisor,

Mr Peter Hunter. Numerous reports and opinions were obtained, including from Dr Greg Harkness, radiologist, noting that the correlation between imaging findings and clinical symptoms is poor, and supported by the literature.

[95] Also, there is an early report of 26 January 2012 from musculoskeletal physician, Dr Bentley, who was of the opinion that the appellant suffered recurrent lumbar disc sprain injury, most recently 25/10/2010.

[96] On 9 March 2016, Mr Hodgson carried out a posterior L4/5 discectomy (right side) and intertransverse fusion with 3DXSRH instrumentation lamina and fermoral head bone graft.

[97] His note included this:

I carried out a central laminotomy at L4/5, extending this to a laminectomy at L4 and right undercutting facetectomies of L4/5, particularly on the right and then left sides. There was an obvious protrusion of the L4/5 disc, however there was a very extensive network of epidural veins quite tortuous and varicose like. These were cleaned and controlled with bipolar diathermy, but proved to be extensive and it was difficult to gain access to the disc, despite a wide undercutting facetectomy to perform a posterior lumbar interbody fusion. I therefore elected not to proceed with this.

The L4 nerve root above and L5 nerve root below on the right side were cleared, as they were on the left hand side and then a standard transverse fusion carried out with bone graft placed over the decorticated intertransverse gutter from L4 to L5 and in the facet joint affording a very satisfactory bone graft mass ...

[98] Regrettably, there was a typographic error in the original of Mr Hodgson's operation report, which incorrectly said "There was no obvious protrusion of the L4/5 disc." This was not picked up and corrected until some time later.

[99] The clinical advisory panel first reported on 3 October 2017 and disagreed that the 2010 accident initiated a degenerative process in the L4/5 disc. The panel set out a series of bullet points supporting its position. These were each responded to by Mr Hodgson in his response dated 28 June 2019.

[100] I note that the panel said:

The client had mechanical back pain but no radicular or sciatic symptoms, in keeping with an acute protrusion.

[101] This is at odds with the note from the St John officer, who recorded some pins and

needles down left leg; this fact also being recorded in the emergency department nursing

assessment.

[102] It seems that the two opposing positions are capable of being argued "until the cows

come home" with no absolutes being identified.

[103] The fact remains, however, that the appellant presents as a man who gets on with his

heavy manual work and in doing so in the course of particularly heavy activities has hurt his

back.

[104] What in my view sets the 25 October 2010 incident apart is that on this occasion he

physically could not just "get on with it". He tried to yell out to his wife, but she was not

there, and using the spade as a walking stick, took him a long time to get inside to the couch.

[105] I conclude that this was more than just a back sprain that would heal with appropriate

exercises. It plainly did not.

[106] I find that in a material way, it set in train the process that resulted in the appellant's

need for surgery in 2016. Accordingly, the appeals are allowed. In respect of Appeal ACR

37/17, ACC's decision of 29 September 2015 declining cover for a disc protrusion injury and

his request for elective surgery funding to remedy the injury, is reversed. Likewise, in respect

of Appeal ACR 119/21, ACC's decision of 21 April 2020 declining cover for L4/5 disc

protrusion, is also reversed.

Hillian

[107] Should there be any issue as to costs, Counsel have leave to file memoranda in respect

thereof.

CJ McGuire

District Court Judge

Solicitors: Young Hunter, Christchurch

Peter Sara, Barrister & Solicitor, Dunedin