Neutral Citation Number: [2012] IEHC 465

THE HIGH COURT

[2011 No. 2411 P]

BETWEEN

KEVIN GREANEY

PLAINTIFF

AND

THE HEALTH SERVICE EXECUTIVE

DEFENDANTS

JUDGMENT of O'Neill J. delivered on the 9th day of November, 2012

1. The plaintiff in this case sues the defendants for negligence in failing to diagnose compression wedge fractures of his T11 and T12 vertebrae and in failing to give him appropriate advice and treatment for those fractures.

2. On 10th July 2005, the plaintiff was riding his motorcycle at speed on the public highway, and as a result of hitting some sort of obstacle on the road, he lost control of the motorcycle and was thrown off the bike, landing on his back on top of a ditch. The plaintiff was unable to move for some time and remained there for a considerable period of time before he managed to attract the attention a passing motorist who assisted him and brought him to his General Practitioner, who immediately referred him to the Accident and Emergency Department of Limerick Regional Hospital. There, he complained of severe pain, especially in his back and abdomen and he recounted the history of the traumatic motorbike accident.

3. X-rays were carried out. Following these, the defendants' doctors advised the plaintiff that there was nothing wrong, that he did not require any further treatment other than rest and analgesics. He was discharged from their care.

4. The defendants in these proceedings acknowledge that the failure to have seen the fractures of the T11 and T12 vertebrae which were apparently readily visible amounted to negligence on the part of the defendants' doctors, as was also, the failure to have offered the plaintiff the appropriate advice and treatment in respect of these fractures.

5. In their defence, the defendants, however, say that the development of the condition of the plaintiff's spine now, was not the result of any negligence on their part, but was the natural progression of his underlying injury, and hence, they dispute that their negligence was the cause of the problems which the plaintiff now has from his spinal injury.

6. Prior to his discharge from Limerick Regional Hospital, the plaintiff thinks he was prescribed anti-inflammatory tablets. He went home and went to bed. The following day, he was in excruciating pain and called his General Practitioner who gave him an injection which relieved the pain. He stayed at home, resting, for approximately one week and then returned to work as a tyre fitter. In the initial period back at work, his colleagues assisted him in carrying out his duties, and as a result he was able to cope with the demands of his work. It is apparent that the pain in his back eased but he still continued to experience some pain, but it would not appear to have been of a significant or serious nature.

7. Towards the end of 2006, he was made redundant in his employment, and in January 2007, he went to Australia, intending to work for a short period and thereby finance travel in Australia. He remained in Australia until December 2007, when he returned to Ireland. Early in 2008, he took up employment with his brother who was in the motorbike business. The plaintiff's job was the repair and servicing of motorbikes. He described his work in this job as significantly heavier or more onerous on his back than working as a tyre fitter, because, as a tyre fitter, he could move about quite a bit, whereas when repairing or servicing motorbikes, he could be required to continuously work on one bike for a full day or more, with the result that there would be a lot of bending or crouching over long periods of time and also, at times, lifting or manually manoeuvring heavy parts at various levels, including hand to shoulder level.

8. Early in 2009, because he was experiencing increasing back pain, he decided to visit his General Practitioner, Dr. Leonard. Since his motorbike accident in July 2005, the plaintiff had attended Dr. Leonard on eight occasions spread over that time and on none of these occasions did he make any complaint of back pain referable to his thoracic spine. On one occasion, 8th September 2006, he complained of lower abdominal pain and low back pain, but it is quite clear from the entry in his GP medical notes that this appears to have been related to a different problem and not the fractures of T11 and T12.

9. When he visited Dr. Leonard on 10th February 2009, he did complain of chronic back problems and told Dr. Leonard he had been seen by a chiropractor. It would appear at this consultation he was seeking a medical form or certificate from Dr. Leonard to enable him to engage in motorbike racing. Following this consultation, the plaintiff was referred by Dr. Leonard for an MRI scan of his mid-thoracic to lumbar region and his left shoulder. This MRI scan was carried out in the MRI Centre at Barrington's Hospital in Limerick on 16th March 2009, and it showed that there was a compression fracture involving the mid to anterior third of the T11 vertebral body and that the vertical height of the anterior body of this vertebra was reduced by 50%, and that there was established, degenerative change in the T10/T11 disc space above.

10. The plaintiff was referred by Dr. Leonard to Professor Eric Masterson, an orthopaedic surgeon, who saw him on 11th May 2009. Professor Masterson's report of the same date, which was admitted in evidence, discloses that the T11 fracture only came to light with the MRI scan performed on 16th March 2009, but that looking at the original X-rays taken in July 2005, this wedge compression fracture could be seen fairly clearly. Professor Masterson was of opinion that the fracture had long since healed, that it was causing a mild misalignment of the facet joints at the back of the spine and that it was this, that was causing his mechanical pain in that region. He was further of the opinion that there was no treatment required other than the taking of simple analgesics, as required, and that the plaintiff's spine was not any weaker as a result of this injury.

11. The plaintiff was later referred by Dr. Leonard to Mr. George Kaar, a consultant neurosurgeon in Cork University Hospital in Cork, and he saw the plaintiff on 29th April 2010. Professor Kaar's reports were also admitted in evidence, the first of these being the report

of 29th April 2010, the second dated 4th May 2011, and the third is dated 8th August 2011.

12. When the plaintiff's saw Mr. Kaar for the first time on 29th April 2010, he complained that there was ongoing soreness in his back and neck following the accident in 2005, but that over the past twelve months, his symptoms have worsened again with more pain at the base of the neck, in the thoracic lumbar area and in the lower back area with the left leg at times going numb and jumping when the plaintiff was sitting. He complained that because his work was physical, there were some days where he had pain all day, and at times, it shoots to the left buttock and leg.

13. On examination, Mr. Kaar found a good range of cervical spine movement. There was slight Kyphosis at T10/T11, with some tenderness in the midline inter-spinous area. Mr. Kaar recommended a follow-up MRI and also a CT scan to determine if the fracture was stable.

14. Following the CT scan which was done on 21st April 2011, Mr. Kaar saw the plaintiff again and in his second report of 4th May 2011, he deals with the outcome of the CT scan. There, he records that the superior end plate fracture at T11 had healed. There was a loss of vertical body height anteriorally of 40%. The posterior vertebral body wall was intact and there was no evidence of extension into the spinal canal. The posterior elements were intact. There was a slight loss of invertebral height anteriorally at T12, also with mild wedging of the anterior superior end plate. There was Schmoris nodes also.

15. Mr. Kaar was of opinion that overall, the appearances were stable, that the plaintiff should concentrate on ongoing care of his back with non-impact resistance exercises to maintain strength and stability.

16. Mr. Kaar saw the plaintiff again on 8th August 2011, and he reports that the plaintiff was continuing to experience pain in the lower thoracic area and also some general back pain, and that there was pain on a daily basis. The plaintiff was undertaking physiotherapy exercises and swimming and was working in a fruit and vegetable shop. He had been unable to return to work as a mechanic and he was taking Amitriptyline at night. On examination of the plaintiff, he found that there was diminished extension in the thoraco-lumbar area with good flexion. There was no obvious Kyphosis or Scoliosis. There was no neurological change in the lower limbs.

17. Mr. Kaar reviewed the previous MRI of 16th March 2009, and compared it with the recent MRI of 14th April 2011, and found that the appearances were unchanged at the T11 level. There remained disc anterior wedging, as before, and changes at the T10/T11 disc anteriorally with flattening of the end plate anterior disc protrusion at T11/T12 and there was slight straightening centred at the T10/T11 level.

18. Mr. Kaar concluded that the MRI appearances were stable, that the problem was a mechanical one and that he could gradually increase exercise despite symptoms. He was of the view that the plaintiff would also need to take increased care of his lower back and it was uncertain if he would manage work as a mechanic again.

19. Also admitted in evidence was the report of Dr. Sanjiv J. Chawda, a consultant neuroradiologist, dated 1st October 2011. Dr. Chawda is of the Department of Neuroradiology, Queen's University Hospital, Rom Valley Way, Romford, Essex RM70 AG, and an honorary consultant neurologist at the Royal London Hospital, Whitechapel, London E1 1BB. Dr. Chawda reviewed the X-rays taken in Limerick Regional Hospital on 10th July 2005, the MRI of 16th March 2009, and the later MRI of 14th April 2011. With regard to the July 2005 X-ray, he found that there was anterior wedging of the T11 (11th thoracic) vertebral body with loss of height of approximately 30%. There was also anterior wedging of the T12 (12th thoracic) vertebral body with a loss of height of approximately 20%.

20. On review of the MRI of 16th March 2009, he found that there was a mild Kyphus (angulation of the spine) at the T11 level, but that the vertebral body alignment was otherwise normal. The T5/T6, T7/T8, T8/T9 and the T10/T11 intervertebral discs show evidence of degenerative change and this was most marked at the T10/T11 level where the T11 vertebral body shows evidence of fracture. There was loss of height anteriorally of the T11 vertebral body. No bone marrow oedema was seen. Appearances were those of an old wedge fracture. The loss of height anteriorally was 50%. There was a loss of height anteriorally of the T12 vertebral body in keeping with an old wedge fracture. This loss of height was 20%. There was no focal disc protrusion causing focal neural compression or foraminal narrowing. The thoracic spinal cord returned normal signal with no evidence of compression.

21. His review of the MRI of 14th April 2011, disclosed no significant changes since the previous MRI of 16th March 2009.

22. The first issue of critical importance in determining whether or not the spinal problems now experienced by the plaintiff were caused by the negligence of the defendants was whether or not there had been an additional loss of 20% in height in the T11 vertebra between the date when the first X-ray was taken in July 2005, and the MRI taken on 16th March 2009.

23. The report of the consultant radiologist, Dr. Alex Stafford, who reviewed this MRI, found that the vertical height of the anterior body of this vertebra was reduced by 50%. Similarly, Dr. Chawda, a consultant neuroradiologist, made a similar finding. It was commoncase that the X-ray taken in July 2005 revealed a loss of vertical height in T11 of 30%.

24. Mr. Jago, a consultant trauma and orthopaedic surgeon from Liverpool, England, who was called as an expert witness by the plaintiff, accepted the finding of 50% loss of height, deferring to the expertise of the radiologists on this topic. Likewise, Mr. Tom Russell, a consultant neurosurgeon in the Western General Hospital, Edinburgh, Scotland, deferred to the expertise of the radiologists, and in particular, the consultant neuroradiologist, Dr. Chawda, and accepted that there was, between 2005 and 2009, an additional loss of 20% in height of the T11 vertebral body.

25. Mr. Andrew Macey, a consultant orthopaedic surgeon at Sligo General Hospital, who was called as an expert witness for the defendants, disputed the 50% loss of height in this vertebral body. He contended that as between the various forms of imaging, plain X-ray, CT scan and MRI, there was always some degree of variation and the 50% figure was at the most extreme end of a potential range of measurement of this loss of height. In this context, he stressed the result of the CT scan carried out by Mr. Kaar, which revealed a 40% loss of height and Mr. Macey was also of the view that CT scans provided a more accurate imaging of bone, whereas MRIs were better for soft tissue imaging. Against this, Mr. Russell expressed a considerable reservation or distrust of CT results on the basis that these were computer reconstructions and could vary depending upon the software used, and also varied depending upon the number of slices used.

26. Two consultant radiologists, one a consultant neuroradiologist, Dr. Chawda, having reviewed the MRI of 16th March 2009, and the subsequent one in April 2011, were satisfied that there was a 50% loss of height in the T11 vertebral body. It is, of course clear, as was pointed out by Mr. Macey in his evidence, that this loss of height did not affect the entire vertebral body, but was confined to

an anterior portion of it which he estimated at about 1cm.

27. I have come to the conclusion that it is probable that there was, in the anterior aspect of the T11 vertebral body, a loss of height of 50% as of March 2009, and this loss of height had progressed from a 30% loss of height as recorded in the plain X-rays taken in July 2005.

28. All of the expert evidence would suggest that this 20% additional loss of height occurred in the immediate post-accident recovery period, while the crushed bone in this vertebral body was healing, namely, in the first three months after the motorbike accident in July 2005.

29. The next issue which arises for consideration is whether or not this additional 20% loss of vertebral height could have been prevented if the plaintiff had been given a suitable body brace to wear for a period of between eight and twelve weeks post-accident, and if the plaintiff had been advised to desist from forward bending and any heavy lifting and to commence appropriate rehabilitative exercises, including swimming.

30. Mr. Jago, in his evidence, stressed the need to prevent any forward bending and the purpose of a brace was to ensure this movement was physically inhibited by the brace. An alternative, though now a somewhat old-fashioned alternative, was bed rest using a hard or bolster pillow to force the back into an extended position thereby preventing any forward flexion. Mr. Jago was adamant that these are standard treatments for this injury which prevent any further loss of vertebral height while the vertebral bone is healing, and if the plaintiff had been so treated, as a fit, healthy young person, it was likely that further loss of vertebral height from 30% would have been prevented and this would have been a much better outcome for the plaintiff in terms of subsequent pain, discomfort and, ultimately, disability. He stressed that because of the plaintiff's age and excellent health, these were excellent prognostic indicators for a very good outcome, if he had been given the appropriate treatment. On the other hand, the fact that he was not given any brace or any other form of treatment to restrain forward flexion and was not given the appropriate advice to avoid any heavy lifting and forward bending, led to him going back to work, which involved heavy manual work, during the bone healing process, which resulted in the kind of pressures being brought to bear on this vertebral body, which led to the additional loss of 20% in height. Mr. Jago's evidence was fully supported by the evidence of Mr. Russell in this regard.

31. Mr. Macey, on the other hand, wholly disputed any connection between the wearing of a brace and the prevention of further loss of height in the vertebral body during the bone healing process. His evidence was to the effect that the weight bearing stresses through the vertebrae produced an axial compression which could not be affected or prevented by wearing a brace and forward flexion was unlikely to impact on the ultimate height of the vertebral body during the healing process. He stressed that the crushing injury to the bone resulting from the trauma of the accident gave rise to a comminuted fracture in the area of the vertebral body affected and the healing of this crushed bone would proceed and achieve its final position or height, regardless of whether or not any forward flexion occurred. In other words, the wearing of a brace would be ineffective to prevent any deterioration in height of the vertebral body and the final position of the fractured bone after healing was "*dialled in*" from the very beginning and was determined by the extraordinary flexion force applied to the spine in this area in the motorbike accident.

32. Whilst Mr. Macey accepted that the pain which the plaintiff suffered since this accident, and particularly, now, was of a mechanical nature, he differed with Mr. Jago and Mr. Russell and also Professor Masterson as to the source of this pain. Mr. Macey was of opinion that there was little or no injury or damage to the facet joints at the back as demonstrated on the MRI scans, and whilst he acknowledged that the distortion of the spinal anatomy in the area of T11 and T12 would have affected ligaments and other soft tissue structures around these facet joints, he felt that the pain was coming from the damaged end plates or surfaces of the moving body i.e. the vertebral bodies which had been fractured in the accident, the pain being generated by movement of these bodies. In his evidence, he said there was very little movement of the facet joints and therefore it was unlikely that the synovial aspects of these joints here would have been significantly affected by excessive wear and tear since the accident occurred. He said no such damage was demonstrated on the MRI scans.

33. Mr. Macey said that there was no correlation between the degree of damage to vertebral bodies and the ultimate outcome in terms of functionality and symptoms. He emphasised that many studies demonstrated this. He referred to one study where the worst outcome was achieved by those patients who did wear body braces. In light of all this, his evidence was that many orthopaedic units now, do not treat patients with these types of fractures, with body braces. Instead, the treatment offered is initial bed rest followed by early mobilisation, and specifically, exercises designed to strengthen the extensor muscles supporting the spine, and swimming to improve mobility in this area.

34. Mr. Macey referred to studies in which patients with mild or moderate fractures of this kind, into which category the plaintiff would fit, had an excellent outcome in 74% of cases, a good outcome in 15% of cases, a fair outcome in 10% of cases and 1% of cases had a poor result. With minor fractures, 85% of cases had an excellent result and 72% of cases with moderate fractures had a good result. In this series, 83% of the patients were treated with bed rest and mobilisation i.e. no brace, and 14% of the patients were fitted with a brace.

35. On the topic of whether or not the wearing of a brace would have prevented any further loss of vertebral height from 30% at the time of the accident, I am left with a diametric conflict of opinion between these eminent experts, and thus, must do the best I can as a lay judge to determine which opinion is, on the balance of probabilities, correct.

36. I would have to say at the outset that the proposition advanced by Mr. Macey is somewhat counterintuitive. Whilst it is undoubtedly the case that the wearing of a brace would not affect at all, axial compression down through the vertebrae, one would have thought that because most of the end plates or surface or rim of the damaged vertebrae were not affected in the original fracture, and also bearing in mind the cushioning effect of the discs, that it was likely that the healthy or unaffected rim around the plate of the vertebrae in question would, with the help of the discs, protect the fractured part of the vertebral body from the axial compression that Mr. Macey described.

37. On the other hand, one would have thought that forward flexion of the spine would concentrate a compressive stress on the fractured portion of the vertebral body, thereby, during the healing process, making it more likely that this crushed comminuted bony material would be compressed to a lower level of height than would otherwise be the case if forward flexion were excluded during the healing process.

38. It is difficult to contemplate that the longstanding treatments for this condition, all of which sought to prevent forward flexion, were misguided and ineffective, insofar as they were designed to prevent further loss of vertebral height during the healing process.

39. As against that, there are the results of the studies referred to by Mr. Macey which seem to suggest that the worst outcomes

were achieved by those who wore a body brace. It is to be observed that the overall numbers in the study seem to have been quite small, and of those only a small proportion were treated with a body brace. It would seem to me that one ought not to extrapolate from these studies' conclusions which seem to fly in the face of a reasoned understanding of the anatomical events occurring in this type of fracture and in the healing process, and also the longstanding experience of treatment in respect of these fractures. In this regard, it is interesting to note that the very force which produced the fracture in the first instance was an excessive flexion force which, on the face of it, would suggest that repetitions of flexion, albeit at a much more benign level, would tend to do something similar to the bone in the affected area *i.e.* to exert a compressing force upon it, but of course, of a far less degree.

40. I have come to the conclusion that the balance of probabilities favours the opinions expressed by Mr. Jago and Mr. Russell, and accordingly, I would hold that it is probable that the loss of height in the plaintiff's T11 vertebral body of 20% in the healing process in 2005 could, in all probability, have been prevented had he been treated appropriately, namely, with a body brace and with advice on appropriate rehabilitative exercises and advice to desist from heavy manual work and lifting for a period of three months until the fracture had healed.

41. Notwithstanding this, the next question which must be considered is whether, and to what extent, the outcome for the plaintiff was determined or affected by the additional loss of height of 20% in the T11 vertebral body. Mr. Macey's evidence was that there was no correlation between the ultimate configuration of the fracture and the outcome in terms of functionality and symptoms.

42. All of the experts agreed that it was necessary to instigate a rehabilitative process involving physiotherapy to strengthen the muscles which support the spine with appropriate exercise, swimming being much favoured. Mr. Macey did recommend the use of a body brace, but solely for the purpose of relieving symptoms, initially so that the rehabilitative process could commence as early as possible. All of the experts also agreed that the plaintiff should have been advised to desist from heavy manual work, and in particular, his work as a mechanic or tyre fitter for a period of three months, until the healing process was complete.

43. Mr. Macey, in dealing with what he described as the "*so what*" principle, suggested, that what the plaintiff actually did, corresponded with the appropriate treatment for this type of fracture, namely, an initial period of bed rest and then a return to mobilisation. If it was to be said that early and extensive mobilisation is the appropriate way to deal with this type of fracture and that, as Mr. Macey put it, the final position of the fracture is "*dialled in*" from the beginning and is unaffected by movements such as flexion, it is difficult to understand why he would concur in the advice not to engage in heavy manual work such as that of a mechanic, since, if he is right about the final position of the fracture being unaffected, the only detriment to a patient would be the potential discomfort to be experienced while doing these things and no more. Indeed, one would have thought that manual work of this kind would, in itself, help improve the condition of the extensor muscles, which support the spine, and the general physical activity associated with the work of a mechanic or tyre fitter would, in a young, healthy person, generally improve mobility and speed up the rehabilitative process.

44. Thus, it would seem to me that advice to desist from that kind of work during the bone-healing period only makes sense in the context of attempting to prevent further damage to the fractured bone.

45. Because the plaintiff did not receive the appropriate treatment and advice, he went back to work after a week and did engage in heavy manual work and through the lifting and forward flexing inevitably involved in all of that, did, as a matter of probability, cause the additional 20% loss of height in the T11 vertebral body. Also, the plaintiff lost out on the benefit of the rehabilitative programme that should have been initiated in that early stage. No doubt as a result of that, he suffered a considerable amount of additional pain and discomfort at that time. He does appear, however, to have made a reasonably good recovery, although I am satisfied that he continued to suffer from some pain and discomfort but not of such severity as to interfere with his ability to carry out his work in reasonable comfort most of the time. For the year that he was in Australia, he obviously enjoyed a period of very considerable relief. When he returned from Australia, for the entirety of 2008, he worked as a mechanic with his brother and this was probably heavier and more demanding work insofar as his back was concerned, but he appears to have been well able to cope with that. However, early in 2009, I am satisfied that he was experiencing much higher levels of pain and discomfort associated with the carrying out of his work. This pattern in the plaintiff's recovery suggests to me that Professor Masterson, Mr. Jago and Mr. Russell are more likely to be correct about the source of the plaintiff's mechanical pain.

46. One would have expected that in the initial period after the motorbike accident when the fractured bone was healing, and perhaps for some time thereafter, that the plaintiff would have experienced pain coming directly from the injured bone. As time progressed and healing became complete, one would have expected pain from this source to have diminished very considerably. This appears to fit in with the pattern of pain experienced by the plaintiff.

47. As time went on, one would also expect the strain resulting from the deformity in the plaintiff's spine to begin to take its toll on the structures affected, namely, the facet joints and the surrounding soft tissues. Again, this appears to fit in with the pattern of pain reported by the plaintiff, namely, that by the beginning of 2009, he was experiencing much higher levels of pain and discomfort. I think it is likely that this latter pain is more convincingly explained as coming from the additional stress or strain placed upon the facet joints and their associated ligaments and other soft structures, rather than coming from the surface or end plate of the fractured vertebral body which, by then, would have fully healed.

48. It would seem to me to follow that the additional 20% loss of height of the vertebral body led to a significant increase in the degree of Kyphus and this was measured by Mr. Macey as going from 18 degrees to 25 degrees, which would appear to me, when looked at in percentage terms, to be a quite significant deviation in the angle of the spine from the vertical or 90 degrees. This additional angulation of the spine, given that it is a permanent feature, must have placed considerable additional stresses and strains on those joints at the back of the spine that are affected by it. In this respect, I accept Mr. Jago's opinion to the effect that this additional loss of height in the vertebral body was likely to lead to a significantly worse outcome than if loss of vertebral height had been maintained at 30%.

49. In my view, the measure of that worsened outcome can be gauged from the plaintiff's experience of pain, particularly early in 2009 and thereafter, which had the effect of creating a tipping point, in the sense that the pain level increased to a point at which it would have been unreasonable to expect the plaintiff to continue working as a mechanic thereby having to endure on a daily basis a significantly increased level of pain.

50. Two factors are significant here. First, there was the late onset of this more significant level of pain resulting from the additional stresses on the posterior aspects of the plaintiff's spine from the increased angulation of the spine resulting from the increased loss of height in the vertebral body. Secondly, the increased level of pain associated with this process meant that the outcome in terms of symptoms, and consequentially functionality, for the plaintiff, was significantly degraded, when compared to the outcome the plaintiff was likely to have had if the loss of height in the vertebral body had been maintained at 30%. In that situation, it is likely, in my

opinion, that the angulation of the plaintiff's spine would have been much less changed with the consequential lessening of the stress and strain in the posterior aspects of the spine, and inevitably, significantly less mechanical pain from that source. I would be of opinion that the plaintiff's pain level in that situation would have been significantly less, than it became, post-2009, and it is probable would have remained within a zone of comfort which would have allowed the plaintiff continue with his occupation as a mechanic, having to endure only tolerable discomfort.

51. As a young, healthy person, and having regard to the fact that the fracture of the T11 vertebra was of moderate degree and the T12 vertebra of mild degree, the plaintiff, had he been given the appropriate treatment and advice, had a high probability, as the studies which Mr. Macey referred to demonstrate, of an excellent or good outcome. The plaintiff's pain levels since 2009 and his inability to tolerate that, working as a mechanic, indicates that he has not had a good outcome and I am satisfied that the failure to achieve a good outcome, as was to be expected, was caused by the combined failures on the part of the defendants to have offered him appropriate treatment and advice for these fractures.

52. As a consequence of these failures, in the initial post-accident phase, the plaintiff undoubtedly suffered significant additional pain and discomfort because of the absence of any rehabilitation programme, and as discussed above, his long-term outcome has also been significantly degraded.

53. I am satisfied that notwithstanding the fact that the plaintiff now has a stable spine with minimal loss of movement, nonetheless, he will suffer significantly greater pain throughout his life than would have been the case had he been offered appropriate treatment in the initial post-accident phase.

54. I am also satisfied that he has had to abandon his occupation as a motor mechanic because of the degrading of his condition as a result of the negligence of the defendants. It is, of course, the case that it might have been possible for him to continue working as a motor mechanic had he been able to endure the continuous high levels of pain that would undoubtedly have been associated with this, but in my view, no one could be reasonably criticised for abandoning an occupation when faced with the prospect of lifelong, significant pain on a daily basis associated with that occupation. Although the plaintiff, who worked for his brother, became redundant, I am satisfied that, coincidentally, he was finding that the pain level associated with that work, had become intolerable, so that he would not have been able to continue with it, in any event, and he could not take up new employment as a mechanic.

55. I am not satisfied that the plaintiff was obliged by his pain levels to give up his job in the fruit and vegetable shop. It would seem to me that whilst there was undoubtedly some heavy lifting involved in this job, the loads did not apparently exceed 10kgs, and having to lift these boxes and bags of fruit and vegetables, was not a constant activity but interspersed with a variety of other activities throughout the day. No doubt the heavy lifting aspects of the occupation would have provoked some pain and discomfort, but I doubt very much that the level of pain and discomfort involved here would have deterred the plaintiff or any other reasonable person from abandoning an occupation that they otherwise wished to adhere to. I am satisfied that the plaintiff's leaving the fruit and vegetable job was mainly driven by his ambition to upgrade his educational status with a view to pursuing a career in the retail trade, which he appears to enjoy. The evidence of Ms. Feely would suggest he has an aptitude for and would be likely to progress in a career in the retail sector.

56. Insofar as the future is concerned, I am not satisfied that on the balance of probabilities that the plaintiff will suffer a future loss of earnings by reason of having to shift from a career as a motor mechanic to a career in the retail trade. He is, of course, entitled to be compensated by way of general damages for the disruption in his vocational life necessitated by having to give up his occupation as a motor mechanic, a career which I am satisfied he did enjoy, and in which, apart from his injury, he would have thrived.

57. As far as the additional pain that the plaintiff has suffered, apart from such discomfort as would have been associated with the original injury, I would award the plaintiff the sum of €35,000 for his pain and suffering to date. For his pain and suffering into the future on the same basis, I would award the plaintiff the sum of €60,000. In arriving at this figure, I bear in mind that by virtue of his change of occupation and by adhering to an appropriate exercise regime, the plaintiff can significantly reduce his pain and discomfort. He will, however, for the rest of his life have additional pain, as discussed above, by virtue of the negligence of the defendants.

58. In addition, the plaintiff is entitled to some general damages to compensate him for the disruption of his vocational life, and in that respect, I would award the plaintiff the sum of €50,000, making a total for general damages of €145,000.