THE HIGH COURT

[2016 No. 3833P]

BETWEEN

CLARE LOUGHNANE

PLAINTIFF

AND

DOREEN SMITH

DEFENDANT

JUDGMENT of Mr Justice David Keane delivered on the 4th June 2019

Introduction

1. This personal injuries action arises from a motor accident that occurred on the afternoon of 5 November 2013 at the junction of Grove Road and Rathmines Road Lower, beside the Grand Canal in Dublin. The Opel Astra motor vehicle being driven eastwards along Grove Road by the plaintiff Ms Loughnane was stationary at the traffic lights at the junction with Rathmines Road Lower beside La Touche Bridge (more commonly referred to as Portobello Bridge) when it was struck from behind by the Range Rover motor vehicle being driven by the defendant Ms Smith.

2. While Ms Smith admits negligence in allowing her vehicle to collide with Ms Loughnane's, the issues in dispute are whether that collision caused injury to Ms Loughnane and, if so, the extent of that injury.

The collision

3. In her sworn evidence to the court, Ms Loughnane provided the following account of the accident.

4. It was late on a sunny afternoon. Ms Loughnane was driving home from the school in Drimnagh where she worked as a schoolteacher to her home in Ballsbridge. Her route home took her down Grove Road, along the banks of the Grand Canal. She was stopped in a line of traffic on that road at the junction with Rathmines Road Lower beside Portobello Bridge.

5. Looking in her rear-view mirror, Ms Loughnane saw a Range Rover coming up behind her vehicle, just as the traffic lights changed and the vehicles in front of her began to move off. Ms Loughane noticed something erratic about the way the Range Rover approached the rear of her vehicle. It appeared to be alternately braking and accelerating. The driver of the other vehicle, Ms Smith, looked panicked and appeared to be struggling with the pedals. Just as Ms Loughnane was about to put her car in gear to move off, leaning towards the gear stick to her left for that purpose, there was a severe impact. Ms Loughnane was jolted forwards, jolted backwards, and then jolted forwards again. In anticipation of a collision, she had tightly clenched her jaw involuntarily.

6. Under cross-examination, Ms Loughnane was challenged on whether the impact was substantial, as she appears to have described it to the engineer instructed on her behalf. Ms Loughnane responded that it was certainly not a slight impact and that, without wishing to get into semantics, it was 'an impact of force.'

7. Ms Smith gave sworn evidence to the court broadly as follows. Her car was a 4.2 litre Range Rover automatic. Since the previous September, it had been in the garage because of a problem with its air suspension system and Ms Smith had picked it up the previous day. She too was driving eastwards along Grove Road towards her home in Ballsbridge. She observed Ms Loughnane's vehicle at the back of a line of traffic directly in front of her. As she went to brake, her foot slipped off the brake pedal and she 'clipped' the rear of Ms Loughnane's vehicle. It was a slight impact. She could not say whether it could have given Ms Loughnane a severe jolt.

8. Pat Culleton, a consultant forensic engineer, gave sworn independent expert evidence on behalf of Ms Loughnane. In summary, his testimony was as follows.

9. On the 12 June 2018, Mr Culleton attended at the scene of the accident with Ms Loughnane and later examined her vehicle. That was more than four and a half years after the accident occurred. Mr Culleton took several photographs of both the locus and the vehicle.

10. Mr Culleton identified Ms Loughnane's vehicle as an Opel Astra. On inspecting it, he noted some minor scuffing to, and displacement by a few millimetres of, its large plastic rear bumper. A small hairline crack was visible on the reflective surface of the rear number plate. The bottom right-hand corner of the black plastic surround of the rear number plate had cracked in two.

11. Mr Culleton pointed out that Ms Smith's Range Rover weighed approximately 2.4 tonnes, whereas Ms Loughnane's Opel Astra weighed 1.3 tonnes.

12. Mr Culleton accepted that the cost of the repairs to Ms Loughnane's vehicle had been assessed at €475.38, comprising charges of €113.20 for paint and sundries; €10.64 for a replacement rear number plate light bulb; and €295 for 5.9 hours labour (to repaint the bumper and replace the bulb) at €50 per hour, together with VAT on those amounts, and that the motor assessor concerned described the damage as consistent with 'a light rear-end impact.' Ms Loughnane had obtained a garage estimate of €544 (inclusive of VAT) for those repairs.

13. Indeed, Mr Culleton acknowledged that the collision must have occurred at less than 10 miles per hour because the plastic rear bumper of the Opel Astra was designed to absorb an impact at that speed and reform, which is what it appears to have done, rather than dent or crumple.

14. Mr Culleton was at pains to insist that, although the impact caused no substantial damage, it was, nonetheless, a substantial one in the context of its capacity to cause injury. Here, Mr Culleton referred to the 'Äv' or 'delta-V' value, representing the change in velocity of an object (whether a vehicle, vehicle occupant or pedestrian) during a collision event, as a common collision severity index. Mr Culleton testified that, according to the literature, a delta-V (or impulse acceleration) of 3-5 miles per hour is often promulgated as the threshold for injury, meaning that the statistical probability of resultant injury exceeds 50% at that value. In other words, Mr Culleton stated, a very low velocity impact can result in significant injury. Mr Culleton was not challenged in that aspect of his evidence.

15. Mr Culleton added that, in his view, the posture of Ms Loughnane at the moment of the collision - that is, leaning forward and to her left to change gear - was of particular significance in greatly increasing the effect of the impact on her cervical spine by depriving her of the support of the headrest and seat back, thus allowing that impact to jolt her backwards.

16. While, on the evidence before me, I do not accept that the collision was a substantial one, I do accept the uncontroverted evidence of Mr Culleton that even a light rear impact - that is, one at a speed of less than 10 miles per hour - is capable of causing soft tissue or other injury, depending upon the circumstances.

The injuries
17. Ms Loughnane drove home after the accident.

i. physical injuries

18. The following day she began to experience severe generalised pain in her head, neck and thoracic spine. After work, she attended her general practitioner on the other side of the city in Baldoyle and was prescribed anti-inflammatory medication. On the day after that, Ms Loughnane attended a physical therapist close to the school who, on assessing her condition, declined to treat her, recommending that she attend a nearby general practitioner, Dr Ahmad Ajina, for medical attention instead. Ms Loughnane first attended Dr Ajina's surgery in Templeogue on 11 November 2013 and continued to do so from then on. During the intervening period, Ms Loughnane had presented at the Accident and Emergency department at St. Vincent's Hospital where an X-ray disclosed no bone injury, although Ms Loughnane recalls that one of the medical attendants there mentioned a concussion.

19. On examination on 11 November 2013, Dr Ajina found Ms Loughnane to have tenderness over the areas of her cervical, thoracic and lumbar spine with a reduced range of movement. Ms Loughnane reported reduced memory, concentration and focus, which, in conjunction with a feeling of nervousness or anxiety, left her unable to perform her work as a teacher. Dr Ajina found no neurological deficit. He diagnosed a soft tissue injury for which he prescribed a course of anti-inflammatories, and referred Ms Loughnane for a lumbar, cervical and brain MRI scan.

20. Ms Loughnane underwent those MRI scans on 28 November 2013. The scan of her brain was normal. That of her cervical spine showed a significant established osteophyte encroachment of the exit foramina bilaterally, with exiting nerve root compression at each side, at the C5-C6 vertebrae. That of her lumbar spine disclosed degenerative changes to her L4-L5 vertebrae where there was a marked disc space narrowing and reactive endplate change, as well as early anterior and posterior osteophyte formation with annular bulging posteriorly at that level.

21. On 4 December 2013, Ms Loughnane attended Dr Ajina again, informing him that she had recently blacked out from pain while walking in the city centre and had been taken to the A & E department at St Vincent's Hospital, where she had been informed that she may have sustained a 'brain concussion type of injury' in the collision that might take some time to settle. Ms Loughnane complained to Dr Ajina of severe pain for which Dr Ajina prescribed anti-inflammatories and muscle relaxants, before referring her to the Pain Clinic at St James's Hospital.

22. On 30 December 2013, Ms Loughnane attended Dr Ajina again complaining that she had now developed left wrist pain, with tenderness and a reduced range of movement. An X-ray, taken that day upon referral to St. James's Hospital, was normal. Ms Loughnane was still complaining of pain in her left wrist and elbow in July 2014, although x-rays taken at that time showed no abnormalities, and Dr Ajina referred her to a consultant rheumatologist in St. James's Hospital.

23. On review on 14 January 2014, Ms Loughnane described problems with the pain medication that had been prescribed for her, and Dr Ajina referred her to Dr Connail McCrory, a consultant pain physician, who reviewed her for the first time on 23 May 2014, when she complained to him of neck pain on both sides, primarily the left, right arm pain, and rib pain on both sides, primarily the left, while acknowledging that her thoracic pain had improved. Dr McCrory performed a cervical facet rhizolysis (a radio-frequency lesioning of the nerve that supplies that facet joint) and a similar radio-frequency treatment of her right C6 dorsal root ganglion in December 2014. In a report that he prepared after reviewing Ms Loughnane's condition on 28 February 2017, Dr McCrory concluded that the treatments he administered had given Ms Loughnane excellent pain relief and that the residual neck pain she then complained of was most likely soft tissue in nature and may well resolve.

24. In a subsequent report prepared on 14 June 2018, Professor McCrory (as he had become) noted that he had not seen Ms Loughnane in the intervening period, as he had been on sabbatical. However, he noted that Ms Loughnane was now attending Dr Das in St James's Hospital, where a left cervical facet rhizolysis had been performed on 21 August 2017 and where further treatment was planned in July 2018. Professor McCrory reiterated his view that these treatments had helped Ms Loughnane considerably, before noting that her injury was most likely a soft tissue one; that examination on 12 June 2018 was normal; and that it was most likely that her pain would settle.

25. Although Dr McCrory did not appear as a witness, his reports were admitted into evidence by agreement between the parties at the beginning of the fifth day of the trial.

26. On 29 December 2014, Ms Loughnane underwent a thoracic spine MRI scan. Dr Ajina has reported that it showed the C5-C6 abnormalities previously noted and disclosed minor posterior annular bulging at T3-T4, T-5, T6-T7 and T7-T8 with no compression of the nerve root.

27. Dr Ajina's diagnosis is that Ms Loughnane has chronic pain syndrome and his prognosis is that recovery is uncertain.

28. Mr Johnson, an independent expert consultant in emergency medicine retained on behalf of Ms Loughnane, examined her on 5 October 2014, preparing a report of that examination on the same date. On the third day of the trial, I was informed that it was to be admitted into evidence by agreement between the parties.

29. Mr Johnson recorded that Ms Loughnane presented for examination approximately 11 months after the accident continuing to complain of constant pain in her left arm, neck and mid-back, together with memory disruption. Ms Loughnane reported that she had not been able to exercise or lift anything since the accident, and that, initially after the accident, she had difficulty opening bottles, squeezing toothpaste and opening doors. She had not been able to teach physical education or to lift a child since the accident. She could not drive for about two weeks after the accident and had to take taxis. Driving for prolonged periods of time still caused her pain. She was still taking analgesics and anti-inflammatories for pain relief. She had experienced blackouts and, in March 2014, had passed out on approximately 5 or 10 occasions. She had to take time off work then.

30. Mr Johnson provided the following opinion and prognosis. Ms Loughnane sustained a moderate degree of musculo-ligamentous injury to her neck; back; left shoulder; left elbow; and left wrist. She was then in the process of recovery and would continue to experience neck; back; left shoulder; left elbow; and left wrist pain, which should lessen with the passage of time. Complaints and examination were consistent. Mr Johnson expected that Ms Loughnane would make a full recovery from those injuries within approximately seven months of his examination.

ii. psychological/psychiatric injuries

31. On 13 March 2014, Ms Loughnane attended Dr Ajina when she complained of worsening symptoms including reduced self-esteem, tearfulness, anxiety, panic and poor memory. Dr Ajina prescribed antidepressants, advised counselling, and referred Ms Loughnane to a consultant psychiatrist, Professor Guerandel, who observed symptoms consistent with Moderate Depressive Disorder. Professor Guerandel referred Ms Loughnane to Professor Pender, a clinical psychologist and neuropsychologist, who examined her on 2 November 2016. Although Ms Loughnane's mother had died suddenly the previous week, she elected to attend that examination and to undergo cognitive testing.

32. On testing, Professor Pender found no evidence of any significant cognitive impairment. Any mild deficits were attributable to fluctuations in her mood and anxiety during the test taking process. Anxiety, depression and general stress were elevated, which Professor Pender found consistent with Ms Loughnane being in an acute bereavement stage. Professor Pender concluded that the secondary consequences of the accident including the long-term chronic pain, depression and anxiety caused by it were having an adverse effect on Ms Loughnane's subjective sense of cognitive functioning, which, in turn, was exacerbating her mood difficulties. Professor Pender recommended Cognitive Behavioural Therapy ('CBT'), which he was optimistic should improve her overall level of wellbeing and health.

33. Ms Loughnane attended counselling or psychotherapy with a psychologist, Ms Flynn at various times from 29 November 2013 onwards, having attended with her previously for a period in 2009. In a report dated 27 May 2018, well over four years after the minor rear-end collision that is the subject of these proceedings, Ms Flynn expressed the view that 'trauma associated with the accident is still ongoing in the form of panic attacks, forgetfulness, anxiety, sleep disturbance and physical distress' and that Ms Loughnane was suffering from post-traumatic stress.

iii. dental injuries

34. Ms Loughnane's evidence was that, at the time of the collision, she had tightly clenched her jaw involuntarily and that, since the date of the accident, she has suffered from tooth pain and diffuse pain around her jaw. In January 2014, more than two months after the accident, she attended her dentist Dr Owens for a scheduled dental check-up. She was too sore to move her neck properly while in the dentist's chair, so she was not treated but the dentist mentioned that there was a possible crack in a tooth he had repaired prior to the accident. In the same month, that tooth did crack when Ms Loughnane was eating.

35. Ms Loughnane attended Dr Owens again on 18 September 2014, when he inserted a temporary filling and proposed root canal treatment that was later carried out on 16 January 2015. A crown was fitted in May 2015. The plaintiff attended Professor Stassen, a dental surgeon attached to St. James's Hospital, on 18 February 2015 and was diagnosed with a cracked tooth/root, which was subsequently extracted. She then commenced treatment preparatory to the installation of a surgical implant. Treatment interventions since 2015 have included further complex reconstruction of two more molar teeth, a gold post substructure and full crown coverage of another tooth in 2016, and treatment between August and September 2017 for occlusal bite stabilisation, involving a protective splint, a gold post substructure, and another crown.

36. Dr Owens prognosis for Ms Loughnane is that she may lose all her root canal treated and conventionally crowned teeth, requiring their replacement with dental implant supported crowns.

The witness testimony on the nature and extent of Ms Loughnane's injuries
i. Ms Loughnane

37. In brief summary, Ms Loughnane's evidence was as follows.

38. She was born in 1974. She resides in Ballsbridge in Dublin and is a primary school teacher. At the time of the accident she was teaching in Drimnagh Castle Primary School on a two-year contract. She has since taken up a full-time position at St. Joseph's Primary School in Dun Laoghaire.

39. Ms Loughnane's evidence concerning the circumstances of the accident and the injuries that she sustained has already been summarised.

40. Ms Loughnane estimated that she has attended Dr Ajina approximately 70 times since she first did so after the accident. She was off work for approximately 20 working days or one month after the accident occurred. On her return to work, she found things difficult. She could not do playground duty. She could not supervise physical education or teach gymnastics. She could not use the blackboard because of the pain attempting to write on it caused to her arms, shoulders and ribs. Her confidence was undermined because she experienced difficulties with her memory and concentration. In the immediate aftermath of the accident, she struggled to fill out forms. She would forget where she had parked her car and would frequently mislay her bank card. Her memory and concentration problems have improved since then. She is now studying for a post-graduate diploma relevant to her teaching career.

41. She suffered neck pain, headaches and pain in her left arm daily. She was restricted in her ability to carry out normal domestic chores and general housework. She took a lot of painkillers and was prescribed sleeping tablets. The pain in her ribs, arms and neck is more infrequent now, although it still flares up from time to time. Her lower back has improved, although she still has some problems with it, and regularly still has pain that travels into her right leg. The pain relief injections that she receives from Dr McCrory provide major relief. She also gets significant relief from dry needling or acupuncture. She is still on medication for pain and anxiety and still takes non-prescription analgesics daily for the joint pain she attributes to the accident.

42. Before the accident, Ms Loughnane had enjoyed sailing and going to the gym for exercise classes, but she has been unable to engage in those activities since then. She is still constrained in the activities that she can undertake as a teacher. For example, she does not feel that she can supervise gymnastics classes properly. The financial pressures associated with the various treatments she has undergone have been the cause of considerable stress and anxiety to her.

43. Her pain reached a low point in the month of March 2014, when she began to experience panic attacks, particularly while

teaching. Dr Ajina prescribed medication for anxiety and, on his advice, she began to attend counselling. Ms Loughnane had attended counselling previously in 2009 to help with marriage difficulties and a redundancy she experienced some time before that.

44. In cross-examination it was put to Ms Loughnane that there was no evidence that she had suffered a concussion in the collision. Ms Loughnane said that there was some suggestion that she had 'post-concussion' symptoms when she attended at St Vincent's Hospital on the weekend after the collision and that Dr Ajina had later referred her for an MRI scan to rule out any brain related injury, which it did.

45. Ms Loughnane accepted in cross-examination that she had a history of high blood pressure (for which the medical term is hypertension), associated with a genetic kidney condition or complaint, and that the symptoms of hypertension include headache and fatigue. Ms Loughnane accepted that, as her medical records appear to show, she was diagnosed with hypertension in 2011, and prescribed medication to treat it on a continuing basis. Ms Loughnane testified that she is now on a higher dosage of that medication because of an increase in her level of hypertension, which she attributes to the consequences of the accident.

46. Ms Loughnane stated that a reference by one of her consultants in a medical report to an injury to her back and neck in a minor accident she suffered when struck by a car as a pedestrian in 1994 was an error and that it was her right arm and right shoulder that had been injured in that accident. Those injuries amounted to no more than bruising and resolved very quickly.

47. Mr Loughnane acknowledged that she had periodontal work done after she got an abscess on her tooth in September 2011, some time prior to the accident. I understand periodontal work to mean treatment to her gums. Ms Loughnane accepted that she had previously had orthodontic work done in the form of the insertion of fixed retainers for her teeth while she had been living in the Netherlands in her thirties. Ms Loughnane agreed that when she presented for treatment for her abscess in 2011, examination showed localised mild to moderate periodontitis (inflammation of the gums), tooth decay, and bone loss. She accepted also that she had a history of grinding her teeth at night.

48. It was put to Ms Loughnane that she had an existing temporomandibular joint dysfunction before the accident and that she had acknowledged as much to the defendant's independent expert orthopaedic surgeon during her examination by him. Ms Loughnane stated that she had never heard the term before counsel put it to her. As I understand it, a temporomandibular joint dysfunction is a problem with the muscles or joints controlling the jaw.

49. Ms Loughnane agreed that she had been prescribed antidepressant medication in 2007 following the breakup of her marriage and a redundancy.

iii. Dr Ajina, general practitioner

50. Dr Ahmad Ajina gave evidence as the general practitioner who treated Ms Loughnane from shortly after the accident onwards. His evidence in chief is reflected in the summary already provided. On the worsening of Ms Loughnane's hypertension, Dr Ajina acknowledged that causation of that condition is multifactorial and, while he would lay emphasis on stress and inability to engage in exercise as a result of her accident as causal factors, he accepted that age, heredity, weight, diet, salt intake and a whole host of other factors may be at play.

iii. Mr O'Toole, orthopaedic surgeon

51. Mr Gary O'Toole, an independent expert orthopaedic surgeon, was called on behalf of Ms Loughnane to give evidence. Mr O'Toole's evidence reflected the contents of the report he prepared on his examination of Ms Loughnane on 3 July 2018. Mr O'Toole's impression was as follows. Ms Loughnane was then a 44-year-old woman, who had been involved in a road traffic accident on 5 November 2013. She had on-going sequelae in relation to that accident and continued to remain a patient of the pain management services in St James's Hospital, from which she was receiving regular injection therapy in the form of rhizolysis. A lot of her symptoms had not settled since the accident and, since it was over four and a half years after the accident when he examined her, Mr O'Toole did not expect her symptoms to improve in the future, with the result that she would be permanently reliant on assistance from pain management services, as well as psychiatric and psychological support services, to help her cope.

52. Under cross-examination, Mr O'Toole acknowledged that Ms Loughnane's MRI scans demonstrated pre-existing degenerative changes in her cervical, thoracic and lumbar spine. Mr O'Toole said such changes are very common and that the significant thing is that they are generally quiescent unless and until burdened by a sudden stress such as an accident, at which point they can become symptomatic.

iv. Professor Pender, clinical neuropsychologist

53. Professor Pender, an independent expert clinical neuropsychologist, was called as a witness on behalf of Ms Loughnane. Professor Pender adopted under oath the contents of his report, including the results of his examination of Ms Loughnane. Under cross-examination, Professor Pender confirmed that there was nothing in the results of his examination of Ms Loughnane to suggest the presence of a brain injury.

v. Dr Owens, dental specialist and prosthodontist

54. Dr Owens gave evidence as the prosthodontist who treated Ms Loughnane. As Dr Owens explained, a prosthodontist is a dental specialist concerned with the restoration of missing and damaged teeth.

55. In very short summary, Dr Owens testified that he first treated Ms Loughnane a year before her accident occurred. She had just successfully completed a course of periodontal treatment. She came to him because she required a crown. Other than that, he found that her dentition generally was very sound when he completed that treatment in April 2012.

56. Ms Loughnane next presented following the accident. She was then complaining of diffused pain and sensitivity associated with several teeth. She also presented with some musculoskeletal and jaw function issues that he considered consistent with the motor accident as she described it to him. Ms Loughnane complained of diffused discomfort and slight limitation of the opening of the jaw, although he did not detect any significant temporomandibular joint dysfunction. Dr Owens referred Ms Loughnane to an oro-facial specialist, who reported back that there were no temporomandibular joint or derangement issues but there were musculo-skeletal issues and neck issues that were perhaps extending into the jaw area.

57. Ms Loughnane presented again on 18 September 2014, complaining of sensitivity in her lower teeth. These teeth had not given Ms

Loughnane trouble previously. This resulted in a referral for root canal treatment after which Dr Owens conducted the necessary restorative work. That treatment was completed in April 2015. Later in 2015, Ms Loughnane presented with a fracture in the tooth that had been crowned in 2012 and was referred to Professor Stassen who arranged for its extraction. Dr Owens was then involved in the treatment plan to replace that tooth. In the course of that treatment, it was discovered that two other teeth would require root canal treatment and crowns. Dr Owens gave evidence concerning the costings he had prepared in relation to that work and possible further replacement work in the future.

58. Dr Owens was asked for his opinion on the cause of the dental problems that Ms Loughnane presented with in 2014. He replied:

> 'Well, when she presented in 2014, dentally the environment had changed a little bit. There was more sensitivity in the mouth. There was certainly cause for concern that some structural damage had occurred in the intervening period. What the epidemiology of that was I am not entirely sure but obviously an accident had occurred in the intervening period and it is unusual to see a significant number of posterior cracked teeth given the general complexion of her dentition which didn't show any signs of excessive wear. In a certain cohort of individuals that have severe bruxing [that is to say, teeth-grinding] activities, generally the molar teeth are only involved after significant wear on the anterior teeth, and there certainly was no wear on the anterior teeth. So, if cracks develop in the teeth there are a number of well documented reasons for that; one is developmental anomalies of the teeth. There were none that I was aware of. Another is heavily restored teeth which are themselves weakened and likely to crack. Another would be excessive forces which probably would be represented by significant wear of a generalised nature around her mouth which wasn't evident and, barring those findings, something of a traumatic nature may have occurred. Now there is an entity known as cracked tooth syndrome which is a syndrome whereby, for whatever localised reason a crack will develop in a tooth, it will move to the periphery of the tooth and part of the tooth will fracture or it will move centrally where the nerve is becoming involved and symptoms arise. Now, she seems to have developed cracks in different areas of her mouth, and also what made me quite suspicious was the fracture of [the tooth crowned in 2012], and having had a reinforced crown restoration, was unlikely to suffer a fracture unless there was some significant pressure.'

59. Dr Owens continued:

> 'On the balance of probability, I think something traumatic has caused the succession of symptoms to evolve and the cracks were midwifed over a period of time and interventions were tailored according to the symptoms. So, it is unusual to see so many cracks distributed in one mouth without the significant wear in the anterior mouth. It wasn't present and also the patient through all accounts reported diligent wear of a night guard which should absorb and dissipate the nocturnal stress that can't be controlled.'

60. Dr Owens was cross-examined at length about Ms Loughnane's dental records. At the conclusion of that process, it was put to him that Ms Loughnane had significant dental problems prior to the accident. He did not accept that. It was then put to him that, had the accident not occurred, Ms Loughnane would have required those treatments in any event. He replied:

> 'You are asking me to ascribe causality to the particular events, I presume. All I can say is that when I rendered the patient dentally fit in 2012 there was no biomechanical reason or no symptomatic reason that I would have identified that required further intervention on my part.'

61. It was suggested to Dr Owens that the need for further treatment might simply have resulted from Ms Loughnane eating something that caused her tooth to crack or, more broadly put, that her problem with various cracked teeth might more obviously relate to her pre-accident dental condition (which had included the identification of a pre-existing coronal crack in one tooth) than the effects of the accident. Dr Owens provided a detailed technical response to those inquiries. I hope I do the evidence he gave no injustice when I attempt to summarise his view as that the former was merely possible, whereas the latter was probable in view of the number of cracks that appeared broadly simultaneously in the root structures of several different teeth.

vi. Ms Flynn, counselling psychologist.

62. Ms Flynn gave evidence on behalf of Ms Loughnane as the psychotherapist who treated her for a period in 2009 and, again, from 2013 onwards. Ms Flynn gave evidence consistent with the contents of her report described earlier. Under cross-examination, Ms Flynn accepted that she has no medical qualifications and was unable to contradict the impression of Dr Guerandel, the psychiatrist to whom Ms Loughnane's GP Dr Ajina referred her, that she did not meet the criteria for post-traumatic stress disorder.

vii. Mr McQuillan, consultant in emergency medicine

63. Mr McQuillan, an independent expert consultant in emergency medicine, was the only witness called for the defence in these proceedings.

64. Mr McQuillan had examined Ms Loughnane twice on behalf of the defendant: first, on 26 July 2016; and second, on 20 September 2018.

65. Mr McQuillan gave evidence consistent with the contents of the two reports that he had prepared: the first, dated 30 July 2016; and the second, dated 20 September 2018.

66. Jumping forward to the second examination on 20 September 2018, Ms Loughnane presented with the following complaints. She was now experiencing shooting pain in her right hip and, to a lesser extent, her left hip. The right leg pain had been going to the foot but was now only going to the knee. Her neck was sore, mainly on the left side. That soreness was experienced intermittently throughout the day. The injections that she was receiving were helping and she was hoping to have another one shortly. She also had some pain in her right arm.

67. Mr McQuillan expressed the following opinion and prognosis. He did not accept that Ms Loughnane had sustained a head injury in the collision and there was no basis for a diagnosis of post-concussion or post-concussive symptoms. In his view it was extremely unlikely that Ms Loughnane had suffered any dental injuries. He did accept that Ms Loughnane could have sustained soft tissue injuries. She had an underlying degeneration in the cervical spine. Soft-tissue injury symptoms tend to settle down over a few months. Where symptoms are caused by the aggravation of an underlying degeneration in the trauma of an accident, those symptoms may take 18-24 months to settle. Symptoms continuing beyond that point are due entirely to the underlying condition and are neither caused nor contributed to by the trauma of the accident. Hence, Ms Loughnane's more recent hip and leg complaints are not related to the accident. Ms Loughnane is undoubtedly experiencing some psychological issues, that are outside Mr McQuillan's field of

expertise. Overall, Mr McQuillan's view was that Ms Loughnane did not then have any physical disability directly related to her accident.

68. Under cross-examination, Mr McQuillan accepted that soft tissue injuries do occur as a result of rear end collisions. He had no difficulty in accepting Mr Johnson's view that Ms Loughnane's symptoms were consistent with a whiplash injury when Mr Johnson examined her 11 months after the accident.

69. Mr McQuillan expressed the opinion that, where persons continue to complain of pain from a soft tissue injury of the kind at issue after more than 18 months have elapsed, there are only three plausible explanations: first, the pain is psychological; second, the person is malingering; and third, in only a very few cases, there is still a genuine physical injury. Mr McQuillan acknowledged that a relatively swift return to work is good evidence against any suggestion of malingering. Mr McQuillan also accepted that moderate depression and, more particularly, a tendency towards stress and anxiety are amongst the commonest causes of an unexpectedly prolonged recovery.

70. Mr O'Toole's view that, having failed to improve in the four and a half years since the accident, Ms Loughnane's symptoms were unlikely to improve in the future, was put to Mr McQuillan. He did no demur, but immediately qualified his answer by saying that those continuing symptoms would not be attributable to any organic injury. Nor did he accept that they might be due to the aggravation by the accident of the underlying degenerative change evident in Ms Loughnane's spinal vertebrae. Mr McQuillan repeated his view that Ms Loughnane's symptoms are subjective and are related to her psychological state, not to any physical injury or physical condition. In a neat summary, Mr McQuillan concluded by stating that continuing complaints so long after a rear-end collision 'tend to be most often psychological, are rarely malingering, and are only sometimes due to physical injury.'

71. There, the evidence concluded.

Findings
72. Negligence is not in issue in this case. I have already found that, while the collision was not a substantial one, it was capable of causing soft tissue injury. On the evidence before me, I find that it did cause such injury to Ms Loughnane.

73. I accept that Ms Loughnane was a sincere and truthful witness. It is perhaps singularly unfortunate from the defendant's perspective, that she was among the worst possible candidates for an accident of this type: first, because of the existing degenerative changes in her spine; second, because of her innate psychological vulnerability; and third, because she involuntarily clenched her jaw when the collision occurred.

74. But, as Clarke J explained in *Walsh v South Tipperary County Council* [2011] IEHC 503, (Unreported, High Court, 9th December, 2011) (at para. 5.6):

> '[I]n the oft quoted case of the injured party with the so-called "egg-shell skull" it can, on occasion, turn out that, due to some weakness or predisposition, a particular injured party suffers much more severe consequences from a relatively innocuous incident than might at first be expected. However, it again remains the case that, if personal injury is a foreseeable consequence of whatever wrongdoing is concerned (say the negligent driving of a motor vehicle), then the fact that those injuries may, in the peculiar circumstances of the case, be much more severe than might have been expected does not deprive the injured party from an entitlement to recover whatever may be appropriate for those injuries.'

75. In this case, the medical evidence adduced on behalf of Ms Loughnane, while extensively tested, was left uncontroverted in its essential aspects. Accordingly, I find as follows. As a result of the accident, Ms Loughnane sustained a moderate degree of musculo-ligamentous injury to her neck; back; left shoulder; left elbow; and left wrist. She did not sustain a concussion. Ms Loughnane had underlying degenerative changes in her spine at the material time which became symptomatic as a result of the accident. The symptoms caused by the physical injury that Ms Loughnane sustained in the accident would have settled within 24 months. However, Ms Loughnane had a profound psychological reaction to the accident, because of a moderate level of depression and, more significantly, her innate vulnerability to stress and anxiety, in consequence of which she has developed chronic pain syndrome, the prognosis for which is uncertain.

76. Ms Loughnane has failed to persuade me that, on the balance of probabilities, the limitations on her ability to exercise and the stress and anxiety caused by the accident, were the specific factors responsible for the worsening of her underlying hypertension and I do not find the defendant liable in damages in that respect.

77. Ms Loughnane also suffered damage from the involuntary clenching of her teeth when the accident occurred. As a result, cracks developed in the root structures of several different teeth, necessitating root canal work and the insertion of crowns. On the prognosis for Ms Loughnane's teeth, I accept Dr Owens evidence that the maintenance regime Ms Loughnane adheres to, including the use of a dental splint at night, will be a significant factor. As I have no reason to doubt that Ms Loughnane will be properly assiduous in that regard, I am satisfied that it is appropriate to accept the lower of Dr Owens' two alternative costings for future dental treatment, which he gave as €15,268.

Conclusion
78. I have assessed general damages for pain and suffering to date at €55,000 and general damages for pain and suffering into the future at €30,000.

79. I will hear the parties on the appropriate figure for special damages, in light of the conclusions I have reached, before making a decree.