

Causation: An Overview

Anna Beale, Cloisters

1. When preparing this talk about causation, after looking at the case law and reading through a number of scholarly articles, I wanted to come up with a pithy quote to begin, that would define what 'causation' is. I failed. The best I could come up with, following a quick Google, was this cryptic utterance from Zeno of Citium:

Fate is the endless chain of causation, whereby things are; the reason or formula by which the world goes on.

2. Fate as causation – or causation as fate - is in many ways the opposite of the legal concept of causation. Causation in law is not inevitable or organic; it is, as we shall see, shaped by considerations of policy and expedience. It does not always produce the results one would expect. But there are certain guiding principles, which I intend to summarise today.
3. This paper does not pretend to be a fully comprehensive consideration of causation in clinical negligence cases; nor does it descend to great detail in respect of any particular area. It is very much not an academic discussion. It is intended as an overview of the most important points that are likely to arise in practice, based on the leading authorities as they stand.
4. The broad areas covered by this paper are:
 - (a) 'but for' causation;
 - (b) *Chester v Afshar* type cases;
 - (c) 'loss of a chance' cases and the use of statistics;
 - (d) 'material contribution' to injury and risk.

'But for' causation

5. In many – indeed most – clinical negligence claims, the question of whether a particular injury was caused by the breach of duty relied upon can be determined by asking whether it would have occurred 'but for' that breach. 'Would have' in this context means would on the balance of probabilities, so the question is whether it is more likely than not that, but for the Defendant's breach, the damage would not have occurred.
6. The application of this 'but for' test is intended to isolate the effective cause of the damage from other, legally and factually irrelevant causes.
7. The example used to illustrate the operation of 'but for' causation in Clerk & Lindsell on Torts is as good as any. In *Barnett v Chelsea and Kensington Hospital Management Committee*,¹ the claimant's husband was negligently sent home from a hospital casualty department, which he had attended complaining of acute stomach pains and sickness. He died later the same day of arsenic poisoning. However, the evidence was to the effect that, even had he been treated promptly, he would have died; thus his widow's claim failed, because it could not be said that, but for the defendant's negligence, he would have recovered.

Is 'but for' causation always sufficient?

8. The 'but for' test of causation sounds simple and logical – and indeed, in many cases, it is. However, there are certain cases where, even though 'but for' causation can be shown, that is not considered sufficient to establish causation in law.
9. Thus in the American case of *Central of Georgia Railway Co v Price*,² the railway company was not liable for injury sustained as the result of a lamp exploding in a

¹ [1969] 1 QB 428

² (1898) 32 SE 77

hotel where the claimant had to stay as a result of the company negligently taking her beyond her destination. This was so even though, but for the company's negligence, the claimant would not have been in the hotel in the first place. The risk of such an event occurring in that hotel on that particular night was so insignificant and therefore so abnormal as to be fairly described as a coincidence, rather than an event causally connected to the defendant's negligence.

Chester v Afshar

10. This type of argument, was relied upon by the defence in the now well-known, but not necessarily well-understood, case of *Chester v Afshar*.³
11. The facts of the case were fairly straightforward. Miss Chester was referred to Mr Afshar, a distinguished consultant neurosurgeon, following a history of back problems. During her consultation with Mr Afshar, he told her that her problems arose from three intervertebral discs, and that they should be surgically removed. The trial judge found that Miss Chester specifically asked about the risks of surgery, and was told, in a throwaway line, that Mr Afshar had never crippled anyone yet. Mr Afshar's account, which was not accepted, was that he had informed Miss Chester that there was a small risk (1-2%) of disturbance to the cauda equina nerve roots which could mean sensory disturbance leading to reduction in power in her legs and alterations in touch, temperature and position sense. He said he had informed her of the risk of paralysis. Miss Chester gave evidence, which was accepted, that if she had been told of these risks she would not have had the operation three days later (as in fact happened), but would have taken time to look further into the risks and options. The judge was not, however, able to find that Miss Chester would never have had the operation. In the event, Miss Chester did undergo the operation three days after the consultation, and the surgery, which was not negligently performed, led her to develop cauda equina syndrome.

³ [2004] UKHL 41; [2005] 1 AC 134

12. The House of Lords was divided in its view of the case. Lords Bingham and Hoffman held that, although Mr Afshar had acted in breach of duty in failing to warn Miss Chester of the risk of cauda equina syndrome, that breach was not causative of her injury.
13. Lord Bingham took the view that the “but for” test was not satisfied, holding, at paragraph 8, that although Miss Chester had shown she would not have consented to surgery on the date it in fact took place had she been properly warned, the timing of the operation was irrelevant to the injury she suffered. The injury would have been liable to occur whenever the surgery was performed and whoever performed it.
14. Lord Hoffman did not opine on the “but for” test explicitly, but dismissed the claimant’s argument to the effect that legal causation was established because the risk of injury occurring if (as would have been the case absent breach of duty) she had undergone surgery on another occasion would have been only 1-2%.

31 In my opinion this argument is about as logical as saying that if one had been told, on entering a casino, that the odds on the number 7 coming up at roulette were only 1 in 37, one would have gone away and come back next week or gone to a different casino. The question is whether one would have taken the opportunity to avoid or reduce the risk, not whether one would have changed the scenario in some irrelevant detail. The judge found as a fact that the risk would have been precisely the same whether it was done then or later or by that competent surgeon or by another.

15. The cornerstone of both speeches was that, as Miss Chester could not show that the risk of the injury would have been any different had the operation been carried out on a different occasion, she could not succeed. This was so even though the risk of the injury occurring on any occasion was tiny.
16. The majority of their Lordships seem to have taken the view that the ‘but for’ test was made out, at least to some degree. In particular, Lord Hope said, at paragraph 81:

The "but for" test is easily satisfied, as the trial judge held that she would not have had the operation on 21 November 1994 if the warning had been given. But the risk of which she should have been warned was not created by the failure to warn. It was already there, as an inevitable risk of the operative procedure itself however skilfully and carefully it was carried out. The risk was not increased, nor were the chances of avoiding it lessened, by what Mr Afshar failed to say about it. As Professor Honoré in his note "Medical non-disclosure, causation and risk: Chappel v Hart" 7 Torts LJ 1, 4 has pointed out, to expose someone to a risk to which that person is exposed anyhow is not to cause anything.

17. However, as flagged up in the quotation from Lord Hope's speech, all three took the view that 'something more' was required to establish causation in a case where the change in the date of the surgery had not increased the risk of injury. All three also took the view that a "modest departure" (in the words of Lord Steyn) from traditional causation principles should be made to allow Miss Chester to succeed. In essence, the 'something more' found to establish causation in this case was the intimate connection between Mr Afshar's breach of duty (the failure to warn of the risk of cauda equina syndrome) and the fact that Miss Chester's injury resulted from the eventuation of that very risk.⁴

18. *Chester v Afshar* has proved a controversial decision. It had the potential to gain wider currency following the decision of the Supreme Court in *Montgomery v Lanarkshire Health Board*,⁵ where the Court confirmed that the Bolam test does not apply when the breach of duty alleged is a failure to obtain fully informed consent. A doctor must take reasonable care to ensure that his/her patient is aware of material risks of injury that are inherent in the treatment, and the question of whether he/she has done so is for the court to determine without reference to a reasonable body of medical opinion.

19. However, in recent years, the application of *Chester* has been limited by the courts, as illustrated by the following examples:

⁴ See in particular Lord Hope's speech at paragraph 87

⁵ [2015] UK SC 11; [2015] A.C. 1430

(a) In *Correia v University Hospital of North Staffordshire NHS Trust*,⁶ the Court of Appeal held that *Chester* did not apply in circumstances where the claimant had been properly consented for a three-stage operation, but the surgeon negligently failed to carry out the final stage. The claimant argued that she had not been warned about the risks of an operation which omitted the final stage, and therefore had not given consent to that operation. The court held, at paragraph 26:

The negligent failure to deal appropriately with the nerve ending did not make this either a different operation for the purposes of consent, nor an operation for which specific consent was required. It was a breach of duty which had the potential to give rise for liability for damages if all the other elements of the tort of negligence were made out. The claimant made an informed choice to the surgery and the injury was not 'intimately linked' with the duty to warn.

(b) As an additional reason for rejecting the claim in *Correia*, the Court held that the claimant had not shown she would have deferred the operation had she been warned, which, it said, was a crucial part of the reasoning in *Chester*. The Court of Appeal reached the same conclusion in *Duce v Worcestershire Acute Hospitals NHS Trust*,⁷ where the claimant had argued that *Chester* established a free-standing principle entitling injured parties to compensation where (1) the injury was intimately involved with the duty to warn; (2) the duty was owed by the doctor who performed the surgery to which the patient had consented; (3) the injury was the product of the very risk that the patient should have been warned about when they gave their consent. The Court reiterated that it is necessary for the claimant to plead and prove that, if warned of the risk, s/he would at least have deferred the operation.

Crossman v St George's Healthcare NHS Trust⁸

⁶ [2017] EWCA Civ 356

⁷ [2018] EWCA Civ 1307; [2018] PIQR P18

⁸ [2016] EWHC 2878 (QB); (2017) 154 B.M.L.R. 204

20. I pause here to note briefly my case of *Crossman*, which lies at the interface between *Chester v Afshar* and “but for” causation. In that case, a conservative course of treatment was recommended for the claimant, but he was in error put on a waiting list for surgery. The error was not adverted to and, although the operation was not performed negligently, he sustained nerve root injury causing permanent symptoms. The risk of this complication occurring was less than 1%. It was agreed that ultimately he would have required surgery in any event, at which point the risk would have been the same.

21. I ran a “but for” causation argument in this case, which was ultimately accepted by the judge. The experts were in agreement that the cause of Mr Crossman’s injury was, on the balance of probabilities, manipulation of a swollen nerve root and residual lateral canal stenosis. The evidence from the expert called on behalf of Mr Crossman was to the effect that it was unlikely that the same degree of residual stenosis would have been present on another occasion and that a number of variable factors (such as the position of the patient on the table, injury from a surgical instrument, excessive manipulation of the nerve root, use of bipolar diathermy and/or a transient drop in blood pressure) could have caused the swelling in the nerve root. It was improbable that the combination of causes that led to the nerve root injury in this case would have occurred on a different occasion.

22. Apparently accepting this argument, the Judge concluded (at paragraph 46):

...but for the admitted negligence of the Hospital, the Claimant would not have had the operation when he did. Had he had the operation on a different occasion, he would not have been advised that he was at any greater risk and, although the risk was in fact higher in his case, it was not one which was more likely than not to be realised. Hence, in my judgment, the claim succeeds on conventional “but for” causation principles.
--

23. The Defendant unsuccessfully sought to appeal this decision on the basis that it rested on the premise rejected in *Chester v Afshar*. Commentators have found it difficult to distinguish the decision from *Chester* on the basis of the wording used

in the judgment, and the case was thought to have been wrongly decided in the County Court case of *Barry v Cardiff and Vale University Local Health Board*⁹ and was not followed in *Pomphrey v Secretary of State for Health*.¹⁰

24. In my view, it is likely that the judge in *Crossman* was influenced by the fact that, unlike in *Chester*, there was a clear causal mechanism for the injury that arose out of factors particular to each individual operation, that would not be replicated on another occasion. Thus it could not be said that the risk of sustaining that particular injury in that particular way was in excess of 50%, should the operation have been performed three months later than it actually was. That said, subsequent decisions mean that it is likely to be difficult to rely on *Crossman* in future.

Loss of a Chance?

25. In the cases discussed above, the only question before the court was whether the injury or damage actually suffered by the claimant was caused by the defendant's negligence. There have, however, been cases where claimants have sought to argue, either as a primary or as a fall-back position, that they should be able to recover damages for the 'loss of a chance' of recovery or improvement, caused by the defendant's negligence. Thus we are still in 'but for' territory, but the argument is not that 'but for' the defendant's negligence, the damage would not have occurred; rather that 'but for' the breach, the claimant would have had a chance of avoiding the damage.

26. In summary, the position the courts have taken on this argument is that claimants cannot recover damages for the loss of a less than even chance of avoiding the injury. If the claimant can show, on the balance of probabilities, that, absent the defendant's negligence, the injury would not have occurred, she will succeed on

⁹ [2019] Med L.R. 191

¹⁰ [2019] Med L.R. 424

“but for” causation. If she can only show, for example, that there is a 25% chance that the injury would not have occurred, she will recover nothing.

27. The well-known case of *Hotson v East Berkshire Health Authority*,¹¹ is a good example of such a case. The claimant fell out of a tree and sustained an acute traumatic fracture of the left femoral epiphysis. The defendant negligently failed to diagnose the injury for five days. The claimant went on to develop avascular necrosis of the epiphysis. The trial judge found that, even had the claimant been treated properly, there was a 75% chance that he would have developed avascular necrosis as a result of the fall. The hospital’s negligence turned that 75% chance into an inevitability. The trial judge held that, on these facts, the claimant was entitled to damages for the loss of the remaining 25% chance of making a full recovery.

28. The House of Lords disagreed with the trial judge. Their Lordships concluded that it was for the claimant to establish on the balance of probabilities that delay in treatment had at least materially contributed to the development of the avascular necrosis. The judge’s finding was that, on the balance of probabilities, after the fall, there were insufficient blood vessels left intact to keep the epiphysis alive. Thus, on the balance of probabilities, the outcome was determined as soon as the claimant fell to the ground.

29. The House of Lords did not consider it appropriate, in *Hotson*, to determine that a personal injury claimant could never recover damages based on a statistical chance of 50% or less that, but for the defendant’s breach of duty, he would not have suffered the injury. The possibility was therefore left open for another day.

30. The point was argued again in *Gregg v Scott*,¹² a complicated case which concerned negligent delay in diagnosing non-Hodgkin’s lymphoma. The claim was brought

¹¹ [1987] AC 750

¹² [2005] 2 AC 176

on the basis of statistical evidence which was said to show that, absent the defendant's negligence, the claimant's chance of recovery (defined as surviving for a period of 10 years) would have been in excess of 50%. By the date of trial, however, evidence had emerged showing that the particular sub-type of the disease from which the claimant suffered had only a 42% chance of survival for 10 years, even when promptly treated. The chances of the claimant surviving for the remainder of the 10 years were assessed at 25%. The claimant argued that he was entitled to be compensated for that reduced prospect of survival.

31. The majority of the House of Lords found against the claimant. The reasoning of the majority is not wholly consistent, with Lord Phillips concentrating on the difficulties of using general statistics of this kind in proving causation of particular injury, whereas Lord Hoffman and Baroness Hale focused on issues of principle. Lord Phillips was particularly concerned about the usefulness of statistics in a case where, as here, the claimant had, even following the delayed diagnosis, already outlived his prognosis.

32. The majority all concluded, however:

(a) that the claimant could not argue that the reduction in his chances of survival was simply a matter for quantification, on the basis that the breach had already caused physical damage because the claimant's cancer had spread during the period of delay. This would, as Baroness Hale observed, lead to a complete reformulation of personal injury law;

(b) that the claimant could not recover damages in respect of the 'lost chance' of recovery, although Lord Phillips again left the door open for the revival of that argument in a different case.¹³

¹³ [2005] 2 AC 176 at [190]. No such case has arisen as yet, but see further paragraph 58 below.

33. It is worth noting that the claim in *Gregg v Scott* was put forward purely on the basis of the prospects of cure for the claimant. There was no alternative argument, as there often is in these cases, that as a result of the defendant's negligence, the claimant's life expectancy was reduced. This would have allowed a claim in respect of the 'lost years'; years when the claimant would have been alive but for the defendant's negligence. Claims are still often put in this way, although the difficulties that arise from the use of generalised statistics (see below) often also apply in 'lost years' claims.
34. The concerns raised by Lord Phillips as to the use of generalised statistics in cases such as these are reflected in the subsequent case law. In *Hague v Dalzell and Fish*,¹⁴ a very similar case concerning late cancer diagnosis, Lewis J conducted an exhaustive analysis of the statistical evidence relied upon by both parties. He concluded that, regardless of the indication from the general statistics that, if treated at an early stage, the deceased would have had a very high chance of survival, the statistics also showed that she had a greater than 50% chance of survival even following her late diagnosis. Sadly she did not survive, which suggested that the general statistical evidence was of little assistance in her case.
35. These cases demonstrate that it is always better, where possible, to avoid total reliance on general statistics, and to focus on the likely course in this particular claimant, both absent and following the defendant's breach of duty. See for example *Schembri v Marshall*,¹⁵ where the Court of Appeal upheld the decision of the first instance judge, who took into account general statistics; the fact that but for the negligence the claimant would have been in hospital at the crucial time and her positive individual characteristics in determining that she would on the balance of probabilities have survived a pulmonary embolism if properly treated.

¹⁴ [2016] EWHC 2753

¹⁵ [2020] EWCA Civ 358; [2020] PIQR P16

36. It is useful to bear in mind the comments of Baroness Hale in *Sienkiewicz v Greif (UK) Ltd*,¹⁶ which was a mesothelioma case, focusing on the relevance of epidemiological evidence. Baroness Hale's comments as cited below, however, have a wider application and are a useful insight into the process a judge will adopt when looking at statistics in the context of causation:

171...The fact that there are twice as many blue as yellow taxis about on the roads may double the risk that, if I am run over by a taxi, it will be by a blue rather than a yellow one. It may make it easier to predict that, if I am run over by a taxi, it will be by a blue rather than a yellow one. But when I am actually run over, it does not prove that it was a blue taxi rather than a yellow taxi which was responsible. Likewise, if I actually develop breast cancer, the fact that there is a statistically significant relationship between, say, age at first childbearing and developing the disease does not mean that that is what caused me to do so.

172 But as a fact finder, how can one ignore these statistical associations? Fact finding judges are told that they must judge a conflict of oral evidence against "the overall probabilities", coupled with the objective facts and contemporaneous documentation...Millions of pounds may depend upon their decision. Yet judges do not define what they mean by "the overall probabilities" other than their own particular hunches about human behaviour. Surely statistical associations are at least as valid as hunches about human behaviour, especially when the judges are so unrepresentative of the population that their hunches may well be unreliable? Why should what a (always middle-aged and usually middle class and male) judge thinks probable in any given situation be thought more helpful than well-researched statistical associations in deciding where the overall probabilities lie? As it seems to me, both have a place. Finding facts is a difficult and under-studied exercise. But I would guess that it is not conducted on wholly scientific lines. Most judges will put everything into the mix before deciding which account is more likely than not. As long as they correctly direct themselves that statistical probabilities do not prove a case, any more than their own views about overall probabilities will do so, their findings will be safe.

Material Contribution

37. Finally, there are cases where the courts have held that, even where traditional 'but for' causation cannot be made out, a claimant can nevertheless succeed in establishing causation if she can show that the defendant's negligence had some part to play in causing the damage.

38. The classic example of such a case is *Bonnington Castings Ltd v Wardlaw*.¹⁷ The claimant was a steel dresser who was exposed to silica dust at his workplace. Some

¹⁶ [2011] UKSC 10; [2011] 2 AC 299

¹⁷ [1956] AC 613

of the dust came from an 'innocent' source (in that its production could not, with reasonable care, have been avoided) and some arose negligently, because the dust extraction plant on the swing grinders was not kept free from obstruction. The claimant developed pneumoconiosis, which the medical evidence showed to have been caused by a gradual accumulation in the lungs of minute particles of silica inhaled over a number of years. Lord Reid considered that this meant the disease was caused by the whole of the noxious material inhaled, and as that material came from two sources, it could not be wholly attributable to dust from the 'innocent' or the 'negligent' source.

39. Lord Reid went on to set out the basis for what we now know as 'material contribution to injury' causation as follows:

...the real question is whether the dust from the swing grinders materially contributed to the disease. A contribution which comes within the exception *de minimis non curat lex* is not material, but I think that any contribution which does not fall within that exception must be material. I do not see how there can be something too large to come within the *de minimis* principle, but yet too small to be material.

40. The claimant would not have been able to show that, but for the contribution of the 'negligent' dust, he would have developed the disease, and would therefore have failed on a simple application of the 'but for' test. Using Lord Reid's 'material contribution' test, however, he succeeded in establishing liability. Furthermore, he succeeded in establishing full liability against the defendant, there having been no evidence on which the contributions of the 'innocent' and 'negligent' dust could be apportioned. It is likely that in a case of this kind brought today, there would be at least some evidence to assist in apportioning the relative contributions of the dust from the two sources.

41. *Bonnington* was applied in a clinical negligence context in the case of *Bailey v Ministry of Defence*.¹⁸ The facts of the case were complex, but in summary, the claimant suffered hypoxic brain damage as a result of a cardiac arrest, which in

¹⁸ [2008] EWCA Civ 883; [2009] 1 WLR 1052

turn resulted from aspiration of her vomit whilst in a severely weakened state. Her weakened condition was caused or contributed to by two factors; poor care by the defendant following a gall bladder operation, and pancreatitis. The latter was not shown to have resulted from negligence on the part of the defendant. The trial judge found that each of these factors contributed materially to the overall weakness (although he could not say in what proportions) and the overall weakness caused the aspiration; thus liability was established. The Court of Appeal upheld his conclusion, with Waller LJ holding, at paragraph 46:

In a case where medical science cannot establish the probability that “but for” an act of negligence, the injury would not have happened, but can establish that the contribution of the negligent cause was more than negligible, the “but for” test is modified and the claimant will succeed.

42. In subsequent cases there have been attempts by defendants to limit this principle, and there has been considerable academic and judicial discussion of the precise basis on which the claimant succeeded in *Bailey*.
43. In *Williams v Bermuda Hospital*,¹⁹ the claimant attended hospital with acute abdominal pain, which turned out to be caused by appendicitis. A CT scan of the abdomen was ordered to assist with diagnosis, but there was a negligent delay in performing the scan. As a result of the delay in performing the scan, surgery on the claimant took place a minimum of 2 hours and 20 minutes later than it would have done absent the defendant’s breach of duty. When the operation did take place, it was found that the claimant’s appendix had ruptured, and he had developed sepsis. He suffered serious complications during the operation as a result of the sepsis, including injury to his heart and lungs.
44. The medical evidence was to the effect that the sepsis had already begun to develop before the negligent period of delay; however, its incremental development then continued for at least a further 2 hours and 20 minutes after the operation should (absent negligence) have taken place. The Privy Council held that

¹⁹ [2016] UKPC 4; [2016] AC 888

the defendant's negligence materially contributed to the continuous process of the development of the sepsis, and thus to the injury to the claimant's heart and lungs.

45. The defendant argued that *Bonnington* could not apply in these circumstances, as in *Bonnington* the inhalation of dust from the two sources was simultaneous, whereas in this case the non-negligent and negligent contributions to the development of sepsis were successive. The Privy Council held that this could not make a difference in principle, although it might on particular facts (e.g. where, as in *Hotson*, it could be shown on the balance of probabilities that the outcome was already determined by the first, non-negligent, contribution).²⁰

46. The Privy Council also considered the Court of Appeal's judgment in *Bailey*, holding that it did not consider that the decision in that case necessitated any departure from the "but for" principle. It was, in the Board's view, an example of the application of the "eggshell skull" principle. The tortfeasor must take his victim as he finds her; hence the claimant's parallel weakness arising from pancreatitis could not enable the hospital to deny liability. This analysis of *Bailey* has been criticised by some academic writers²¹ and practitioners,²² many of whom continue to regard it as an application of the 'material contribution' test. It was, however, endorsed by HHJ Auerbach following a comprehensive analysis of the authorities in *Davies v Frimley Health NHS Foundation Trust*.²³

47. In *Davies*,²⁴ HHJ Auerbach set out a short analysis of the circumstances in which what has compendiously been termed "material contribution" might apply:

²⁰ Similarly, in *John v Central Manchester and Manchester Children's University Hospitals NHS Foundation Trust* [2016] EWHC 407; [2016] 4 WLR 54, the court rejected the defendant's argument that a 'material contribution' analysis can only apply where there is a single causative agent; it may also apply where multiple factors contribute to the injury.

²¹ See e.g. 'Causes and Contributions', Stapleton & Steel, 2016 132 L.Q.R. July

²² See e.g. Simon Kilvington QC in his paper "Material Contribution - Where are we Now?" written for the PIBA Conference on 2nd April 2017 at [17].

²³ [2021] EWHC 169 (QB); [2021] PIQR P14 at [207] - [208]

²⁴ *Ibid*, at [200]

- (a) where divisible harm has been caused, a party will be liable if their culpable conduct made a contribution to the harm, to the extent of that contribution;
- (b) where the harm is indivisible, a party will be liable for the whole of it, if they caused it, applying “but for” principles;
- (c) if two wrongdoers have together caused an indivisible injury, in respect of which it is impossible to apportion liability between them, then each is co-liable for the whole of the injury suffered.

48. It is important to contrast these cases, where the courts were able to find that, on the balance of probabilities, the defendant’s breach of duty did in fact materially contribute to the damage sustained, with cases where all that can be said is that the breach materially contributed to the risk of damage.

49. Establishment of causation on the basis of ‘material contribution to risk’ first emerged in *McGhee v National Coal Board*,²⁵ an industrial disease case. The claimant, who worked at a brickworks, developed dermatitis as a result of contact with brick dust. Some of that contact was unavoidable, but it was admitted that there was a failure to provide adequate washing facilities, which meant the dust remained on the claimant’s skin for a longer period than necessary, whilst he cycled home.

50. Two possible causal mechanisms were posited: either that an accumulation of minor abrasions of the horny layer of the skin was an essential precondition for development of the condition (in which case it would be easier to argue that every minor abrasion contributed to the injury), or alternatively, that the disease started at one abrasion and then spread, so that multiplication of abrasions merely increased the number of places where the disease could start, and thus the risk of its occurrence.

51. Lord Reid held that it did not matter which of these analyses was correct. He held that in a case such as this, a broader view had to be taken of causation, and he did

²⁵ [1973] 1 WLR 1

not accept that a distinction should be drawn between materially increasing the risk that disease would occur, and making a material contribution to its occurrence.

52. In *Wilsher v Essex Area Health Authority*,²⁶ there was an attempt to use the *McGhee* analysis in a clinical negligence context. The claimant was born prematurely and required additional oxygen to survive. By the time the case reached the House of Lords, the position was that the defendant had negligently misplaced a catheter measuring the amount of oxygen in the claimant's blood, as a result of which he received an excessive amount of oxygen during the first 38 hours of his life. The claimant subsequently developed a condition called retrolental fibroplasia (RLF) which seriously limited his vision. The medical evidence was that this condition could be caused by a sufficiently high level of oxygen, but also that there was a correlation between the condition and a number of other conditions from which premature babies suffer, and from which the claimant himself suffered.

53. Whilst there was some evidence to the effect that the administration of oxygen was probably at least a contributory cause of the claimant's RLF, the trial judge held that the claimant had established a prima facie case on causation not on this basis, but on the basis that the negligence had materially increased the risk of RLF. He held that the burden of showing that the negligence had not in fact caused or materially contributed to the development of RLF moved to the defendant.

54. The claimant relied heavily on *McGhee* before the House of Lords. After a lengthy analysis of the judgments, Lord Bridge concluded that *McGhee* established no new principle of law, but that "adopting a robust and pragmatic approach to the undisputed primary facts of the case, the majority concluded that it was a legitimate inference of fact that the defender's negligence had materially contributed to the pursuer's injury." Their Lordships therefore declined to find that *McGhee* had created a new exception to 'but for' causation.

²⁶ [1988] 1 A.C. 1074

55. The House of Lords found that the claimant in *Wilsher* could not establish liability. There were a number of different agents that could have caused RLF, of which excessive oxygen was one. However, the judge had not made a finding that excessive oxygen in fact caused or contributed to the RLF suffered by the claimant. Lord Bridge quoted with approval Browne-Wilkinson LJ's comments in the Court of Appeal, distinguishing *McGhee* on the basis that in that case, there was there only one agent (brick dust) capable of causing the dermatitis, and the failure to take a precaution against it doing so had indeed been followed by the development of dermatitis, caused by brick dust. That was a common sense conclusion. In *Wilsher*, where several agents were at play, the position was different.
56. The House of Lords' treatment of *McGhee* in *Wilsher* was not very satisfactory, and in *Fairchild v Glenhaven Funeral Services Ltd*,²⁷ the House of Lords recognised that *McGhee* did establish a new principle, which can be described as the establishment of causation through 'material contribution to risk'. That principle allowed the claimants to establish liability against the defendants for their (or their relatives') development of mesothelioma as a result of exposure to asbestos dust. The difficulty previously faced by the claimants was that the exposure to asbestos dust had come from multiple sources. Whilst it could be said that increased exposure to such dust increased the risk of developing mesothelioma, the state of scientific knowledge at the time was such that it could not be said whether the disease was caused by a single asbestos fibre, or an accumulation of fibres. Thus it could not be said that exposure during any particular employment materially contributed to the development of the condition. Their Lordships held that it was appropriate to apply the *McGhee* 'material contribution to risk' analysis to allow the claimants to recover.
57. Their Lordships also, however, emphasised that caution was necessary in applying the principle, and indeed held that the House of Lords was correct not to apply it in *Wilsher*. Lords Hoffman and Rodger both sought to define the limits of

²⁷ [2003] UKHL 22; [2003] 1 AC 32

application of this modified rule fairly narrowly. Thus far, it has been used principally in other mesothelioma cases, although it was also recently applied in a case involving lung cancer (not mesothelioma) also arising from occupational exposure to asbestos, where the facts and medical evidence were very similar to those in *Fairchild*.²⁸

58. It is not yet clear whether this approach might be available in some kinds of clinical negligence cases. It is possible that, as tentatively suggested by Simon Kilvington QC,²⁹ similar arguments could be deployed in delayed cancer diagnosis cases such as *Gregg v Scott*, but I am not aware of any attempts to do so to date. There are, however, clearly analogies between such cases and *Fairchild*; the current state of medical science does not allow us to determine the precise contribution of the negligence to the ultimate injury; the defendant's conduct will have created a material risk of injury to the claimant which is capable of causing the injury in fact suffered by the claimant; and the totality of the injury is caused by a single agency (the progression of the cancer). It seems likely that the higher courts will be called upon to consider such an argument before too long.

ANNA BEALE
CLOISTERS
26th July 2021

²⁸ *Heneghan v Manchester Dry Docks Ltd* [2016] EWCA Civ 86; [2016] 1 WLR 2036

²⁹ In his paper for the PIBA Conference, 2nd April 2017, "Material Contribution – Where are we Now?"