SUPREME COURT OF QUEENSLAND

CITATION:	*Sullivan Nicolaides Pty Ltd v Papa* [2011] QCA 257
PARTIES:	**SULLIVAN NICOLAIDES PTY LTD** ACN 078 202 196 (appellant) **v** **ANTOINETTE PAPA** (respondent)
FILE NO/S:	Appeal No 11479 of 2010 SC No 1588 of 2005
DIVISION:	Court of Appeal
PROCEEDING:	General Civil Appeal
ORIGINATING COURT:	Supreme Court of Queensland
DELIVERED ON:	27 September 2011
DELIVERED AT:	Brisbane
HEARING DATE:	10 March 2011
JUDGES:	Margaret McMurdo P and Margaret Wilson AJA and Martin J Separate reasons for judgment of each member of the Court, Margaret McMurdo P and Martin J concurring as to the order made, Margaret Wilson AJA dissenting
ORDER:	**Appeal dismissed with costs.**
CATCHWORDS:	PROFESSIONS AND TRADES – HEALTH CARE PROFESSIONALS – MEDICAL PRACTITIONERS – LIABILITY IN TORT – DUTY TO WARN OF RISKS – where the respondent had an artificial mechanical valve inserted in her heart – where as a consequence of this the respondent was required to take anti-coagulant medication, Warfarin – where the appellant was engaged to analyse the respondent's blood and advise her on the correct dosage of that medication – where the appellant advised the respondent that it would no longer perform those tasks – where two days later the respondent suffered a stroke caused by a blood clot which resulted in severe disabilities – where at trial the respondent claimed the appellant had been negligent in a number of respects – where the trial judge found that the appellant should have given certain advice to the respondent's general practitioner – where the trial judge found that the appellant had not given that advice and that had it done so the respondent's treatment would have changed and the respondent would not have suffered a stroke

– where the appellant argues that the trial judge erred in not characterising the respondent's claim as a loss of a chance of a better medical outcome – where the appellant argues that the trial judge erred in not considering the medical outcome of the alternative treatment – where the appellant contends that the trial judge's finding of liability is not supported by the evidence – where the appellant further argues that the trial judge's finding that the respondent's general practitioner would have referred the respondent to her cardiologist is contrary to the evidence – where the appellant contends there is no evidence of causation – where the appellant further argues that the learned trial judge erred in failing to assess the evidence prospectively and used unjustified hindsight – whether the learned trial judge erred in his finding of liability

Arkinstall v Jenkins [2001] QSC 421, cited
Arndt v Smith (1997) 148 DLR (4th) 48; [1997] 2 SCR 539, considered
Chappel v Hart (1998) 195 CLR 232; [1998] HCA 55, cited
Commercial Union Assurance Company of Australia Ltd v Ferrcom Pty Ltd (1991) 22 NSWLR 389, cited
Ellis v Wallsend District Hospital (1989) 17 NSWLR 553, considered
F v R (1983) 33 SASR 189, considered
Firth v Sutton [2010] NSWCA 90, applied
Gregg v Scott [2005] 2 AC 176; [2005] UKHL 2, cited
Henderson v Low [2001] QSC 496, cited
Jones v Dunkel (1959) 101 CLR 298; [1959] HCA 8, cited
Kuhl v Zurich Financial Services Australia Ltd (2011) 85 ALJR 533; (2011) 276 ALR 375; [2011] HCA 11, cited
Malec v J C Hutton Pty Ltd (1990) 169 CLR 638; [1990] HCA 20, cited
Papa v Sullivan & Nicolaides Pty Ltd [2010] QSC 364, cited
R v Navarolli [2010] 1 Qd R 27; [2009] QCA 49, cited
Reibl v Hughes (1980) 114 DLR (3d) 1; [1980] 2 SCR 880, cited
Rogers v Whitaker (1992) 175 CLR 479, 489; [1992] HCA 58, considered
Rosenberg v Percival (2001) 205 CLR 434; [2001] HCA 18, applied
Sidaway v Governors of Bethlem Royal Hospital [1985] AC 871; [1985] UKHL 1, considered
Tabet v Gett (2010) 240 CLR 537; [2010] HCA 12, cited
Vairy v Wyong Shire Council (2005) 223 CLR 422; [2005] HCA 62; cited

COUNSEL: S C Williams QC, with K A Barlow SC, for the appellant
D O J North SC, with M E Eliadis and J O McClymont, for the respondent

SOLICITORS: Clayton Utz for the appellant
Shine Lawyers for the respondent

[1] **MARGARET McMURDO P:** I agree with Martin J's reasons for dismissing this appeal but wish to give some supplementary reasons.

[2] When the appellant, pathologist Sullivan Nicolaides Pty Ltd (SNPL) removed the respondent, Antoinette Papa, from their Warfarin Care Service (WCS) on 27 February 2002, she was extremely vulnerable. There can be no doubt that SNPL owed Ms Papa a duty of care. The primary judge correctly identified that the content of the duty was as discussed by Mason CJ, Brennan, Dawson, Toohey and McHugh JJ in *Rogers v Whitaker*,[1] in essence, a single comprehensive duty to exercise reasonable care and skill in the provision of professional medical advice and treatment.[2] His Honour also appreciated that, although the evidence of medical experts was highly relevant in determining this issue and often decisive of it, the answer to the question whether SNPL was negligent did not turn solely on expert medical evidence. It was for the court to determine the content of the duty owed and the steps taken by SNPL to meet that duty: *Rosenberg v Percival.*[3] His Honour further appreciated, citing Hayne J in *Vairy v Wyong Shire Council*,[4] that care must be taken to avoid determining these matters retrospectively with hindsight; the court's obligation was to consider the issue at the time the injury arose.[5]

Uncontentious facts

[3] The following facts are uncontentious. Ms Papa was a 45 year old woman with an artificial mechanical mitral valve surgically placed in her heart in the previous July. This required her to participate in a life long regime of anti-coagulant medication (in lay terms, to thin the blood) to avoid the risk of developing clots including thromboembolisms. Her cardiac surgeon recommended the anti-coagulant medication, Warfarin, and referred her to SNPL's WCS shortly after the surgery.

[4] Warfarin levels are detected by a blood test giving an International Normalised Ratio (INR), a standardised measure of prothrombin, which gives an indication of the time it takes for blood to clot. Ordinarily, a person not taking Warfarin would have an INR of 1. If a person taking Warfarin has an INR of 5, the person's blood takes five times as long to clot as the person not taking Warfarin with an INR of 1. Ms Papa's target range to avoid clots was an INR of between 3 and 4. If her INR dropped below the target range, she was at increased risk of developing clots including thromboembolisms. This risk magnified very significantly when her INR was at or below 1.5. If her INR exceeded the target range, her risk of haemorrhaging, including a haemorrhage into the brain or spine, increased significantly. This risk magnified very significantly when her INR was at or above 6.5. Generally speaking, the risk of haemorrhaging at INR 6.5 or above was significantly greater than the risk of clots at INR 1.5 or less. But the whole point of Ms Papa's Warfarin treatment was to reduce her risk of clots by keeping her INR within the target range. The role of the WCS was to manage Warfarin dosage so that the patient's INR was kept within the patient's target range.

[5] Ms Papa's INR readings were erratic. It was not established that this was because of any acts or omissions on her part. On 24 January 2002, her reading was 6.5 but on

---

1 (1992) 175 CLR 479, 489.

2 *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [79].

3 (2001) 205 CLR 434, Gleeson CJ [7] 439, Gummow J [63] 453-455; *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [80].

4 (2005) 223 CLR 422, 455-456 [105].

5 *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [81].

26 January it had fallen to within the target range of 3.3. On 30 January, it had fallen below the target range to 2, greatly increasing her risk of clots. But on 9 February it had risen to a dangerously high 7, greatly increasing her chance of haemorrhage. On 13 February it fell dramatically to 2.4. On 16 February, it had fallen further to a dangerously low 1.5; by 19 February, it remained dangerously low, only rising to 1.6. On 22 February it fell again to an even more dangerously low 1.5. On 25 February it rose slightly, but only to 1.8 and so remained dangerously low.

[6] On 27 February 2002, SNPL advised Ms Papa and her general practitioner, Dr Powell, that they would no longer provide her with their WCS.

Other relevant evidence and findings

[7] SNPL gave Ms Papa no advice other than to provide her with Warfarin dosage instructions and the dates for her next blood tests; she was not routinely advised of her INR levels or their health implications during January and February 2002. Nor did SNPL give any advice to her GP, Dr Powell, prior to 27 February.[6] Ms Papa's INR results were posted to Dr Powell so that by the time he received them they were already out of date.

[8] Dr Beverely Rowbotham, a pathologist and principal at SNPL, telephoned Dr Powell on 27 February. She told him she was notifying him of SNPL's decision not to monitor Ms Papa's Warfarin dosages any longer as her INR levels were erratic and SNPL apprehended this was because of her non-compliance with their guidelines.

[9] Dr Powell did not realise he was speaking to a medical practitioner. He was "flabbergasted" by SNPL's statements and "didn't know how to respond". It was not his common practice to manage patients' Warfarin care.[7] He did not think to refer Ms Papa to a cardiologist because he was not then aware of the need for such a referral and he understood that haematologists such as SNPL or Queensland Medical Laboratories (QML) were the appropriate managers of INR levels. If SNPL had told him Ms Papa's case was high risk, he would have followed their instructions as they were the specialist carers for her Warfarin control. If SNPL had told him she should consult with her cardiologist, he would have referred her directly to her cardiologist, Dr Paul Garrahy. He found Ms Papa a pleasant, affable, agreeable patient who followed his treatment recommendations.

[10] Professor Richard Fox, a haematologist oncologist, opined that he would have involved Ms Papa's cardiologist in her treatment plan after her second or third low INR reading following 13 February 2002. Had her INR levels been maintained around level 3, she probably would not have suffered the stroke.[8]

[11] Dr Peter Davidson, a haematologist, gave the opinion that had heparin or clexane been administered to Ms Papa as an anti-coagulant this would have reduced the risk of thromboembolism and the stroke probably would have been avoided.[9]

[12] Professor Jack Metz, also a specialist haematologist, considered that, according to the knowledge at the time, from 16 February 2002 Ms Papa was at an increased risk

---

6 *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [158].
7 Transcript 3-37.
8 Exhibit 1.3; AB 380.
9 Exhibit 1.14; AB 415.

of thromboembolism so that the primary focus for her haematologist was to avoid this risk.[10] On the balance of probabilities she would not have suffered a stroke had her INR level been around 3.[11] He would have informed her GP on 22 February 2002 of her increased risk and left it to the GP to decide whether to refer Ms Papa to a cardiologist.[12]

[13] Dr Garrahy had been Ms Papa's treating cardiologist from about 1999. He was available to see her in February 2002. Sometimes, although uncommonly, he was involved, if requested, in the management of patients who have "dreadful troubles with anticoagulent control" and it is necessary to take them off Warfarin therapy and to use alternative therapy.[13] He considered that a patient with a mitral prosthetic valve who had an INR of 1.5 (like Ms Papa between 16 and 25 February 2002) was clinically a "red alert" situation.[14]

[14] Dr Garrahy would have recommended, after Ms Papa's second subtherapeutic INR reading on 19 February 2002, the institution of either sub-cutaenous clexane (1 mg/kg twice daily) or that she be admitted to hospital for intravenous unfractionated heparin infusion. An INR below 2 in Ms Papa was concerning. Two INR readings below 1.8 over three days flagged an increased risk of thromboembolism. It was possible, given her INR history, that her INR could spike upwards and place her at risk of haemorrhaging. But only 20 per cent of haemorrhages result in cerebral or spinal bleeding. The therapeutic heparin would be discontinued once her INR was over 2. Her history of unstable INR results warranted her admission into hospital for the use of unfractionated intravenous heparin under close supervision with the specific aim of increasing her INR whilst avoiding a sudden upwards spike. A patient like Ms Papa with a mechanical mitral prosthesis and a dangerously low INR of 1.5 was exposed to a risk of thromboembolism.

[15] Ms Papa "had no idea" her INR levels were sub-therapeutic between 13 and 27 February 2002. SNPL informed her by telephone on 27 February 2002 that they would no longer manage her Warfarin dosages and that she needed to see her GP. She thought this was done by SNPL's clinical nurse manager. She was "really shocked" and "had no idea what was going on". She telephoned her husband and then Dr Powell for the earliest possible appointment. She attended on Dr Powell on 28 February 2002. He telephoned SNPL and was informed that the result of her latest blood test was an INR of 1.7. He referred her to the Warfarin monitoring service run by another firm of pathologists, QML, and gently adjusted her Warfarin dose upwards. They also discussed her stress levels and her need to take care with her diet. The next day Ms Papa suffered a stroke caused by an embolism or blood clot, resulting in significant disabilities.[15]

[16] If SNPL had recommended to Ms Papa, between 13 February and 27 February 2002 that she consult her GP or cardiologist because of her low INR levels, she "would have asked them to elaborate a little bit, explain … why [she] needed to do that, what the risks were … and [she] would have gone and seen [her] GP or [her]

---

10 Transcript 4-52.
11 Exhibit 18.1; AB 537.
12 Transcript 4-55.
13 Transcript 2-75.
14 Transcript 2-76.
15 As quantum is not in issue in this appeal it is unnecessary to further consider these matters.

cardiologist straight away".[16] Had they recommended treatment she would have followed their recommendations. Had SNPL told her at that time that her low INRs placed her at an increased risk of a stroke she would have asked for advice about what to do and who to talk to and would have followed that advice.[17]

The judge's findings as to the duty of care

[17] The primary judge found that, in these circumstances, a reasonable Warfarin care haematologist in the position and with the knowledge of SNPL would have contacted Ms Papa to advise of the unstable history of her INR readings and of the persistent sub-therapeutic levels from 16 February; to advise or re-affirm the risks associated with sub-therapeutic INR readings; to advise of the plan to incrementally increase dosage levels to try to return her INR into the optimal 3 to 4 therapeutic range; and to advise that she should consult her GP about managing the risks associated with her low INR levels.[18] This should have been done at the latest by the time of the INR reading of 1.5 on 22 February.[19]

[18] His Honour also found that a reasonable Warfarin care haematologist in the position of SNPL would have contacted Ms Papa's GP, Dr Powell, at the latest after receiving the INR reading on 22 February, to involve him in managing her persistent under anti-coagulation. He was her primary medical care provider and was alert to her situation and circumstances relevant to the risks she faced. SNPL should have contacted him to ensure he was aware of her persistent sub-therapeutic INRs; to advise of the dosage approach being adopted; to re-affirm the existence of risks associated with sub-therapeutic INRs; and to recommend that he undertake or investigate management of the risks associated with them.[20] The judge appreciated, however, that it was not reasonable for SNPL to make contact directly with Ms Papa's cardiologist; this was a matter for Dr Powell after receiving the appropriate advice from SNPL.[21] SNPL should have raised the prospect with Dr Powell by investigating alternative or supplementary forms of anti-coagulation and to "raise the prospect of this needing to be done in consultation with [Ms Papa's] cardiologist.[22] By not communicating this advice to Ms Papa and this advice and guidance to her GP, SNPL failed to meet the standard of care required of a reasonable Warfarin care haematologist.[23]

[19] For the reasons given by Martin J,[24] these findings were open on the evidence and SNPL has not demonstrated they should be set aside.

The judge's finding that Dr Powell would have referred Ms Papa to Dr Garrahy

[20] The judge further concluded that, had that advice been given by no later than 22 February 2002, Dr Powell would have referred Ms Papa to her cardiologist,

---

16 Transcript 1-45; *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [26].
17 Transcript 1-46; *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [169].
18 *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [163].
19 Above, [164]. This paragraph of the judgment refers to 22 February 2010, this is plainly a typographical error and should read 22 February 2002.
20 Above, [165].
21 Above, [166].
22 Above, [167].
23 Above, [168].
24 See [125]-[136] of Martin J's reasons.

Dr Garrahy.[25] The appellant correctly submits that Dr Powell did not in terms state that he would have independently referred Ms Papa to Dr Garrahy. But it was not Dr Powell's common practise to manage his patients' Warfarin care. The whole point of Ms Papa's Warafarin care was to lower her very real thromboembolism risk resulting from her artificial mechanical valve by maintaining her INR between 3 and 4. It was reasonable to infer the following from Dr Powell's evidence. Had he appreciated her great risk as at 22 February of developing a potentially deadly thromboembolism because of her persistently low INRs, and that he should urgently investigate (perhaps in consultation with her cardiologist) alternative or supplementary forms of anti-coagulation to restore her INR to the therapeutic range, he would have involved Dr Garrahy in her treatment and referred her to him.

A loss of a chance?

[21] The judge concluded from Dr Garrahy's evidence that, if Ms Papa had been referred to him at that time, he was available to attend on her and would have treated her as he described.[26] Had she undertaken this treatment, her risk of suffering a thromboembolism would have been ameliorated and it was probable that she would not have suffered a stroke on 1 March 2002.[27] His Honour concluded on the balance of probabilities that SNPL's failure to advise Ms Papa and Dr Powell appropriately by about 22 February 2002 was a breach of its duty of care to Ms Papa which was causative of her suffering a stroke on 1 March 2002.[28]

[22] I cannot accept SNPL's contention that Ms Papa's claim was for the loss of a chance of a better medical outcome, and that the judge's conclusion as to liability was contrary to the principle re-affirmed recently by the High Court in *Tabet v Gett*.[29] The judge found on the balance of probabilities that, had SNPL given advice to Ms Papa and Dr Powell consistent with its duty of care to Ms Papa by 22 February 2002, Dr Powell would have referred her to her cardiologist, Dr Garrahy; she would have taken the treatment he recommended; her INR would have been raised to her therapeutic range; and she would not have suffered a stroke. These were certain findings, established on the balance of probabilities, consistent with the common law requirement that courts must reduce to legal certainty questions to which conclusive answers cannot be given: see *Malec v J C Hutton Pty Ltd*.[30] This has the result that, when loss or damage is proved to have been caused on the balance of probabilities by a defendant's act or omission, the plaintiff recovers the entire loss suffered, even if there was a forty-nine percent chance of it not occurring. Kiefel J in *Tabet* referred to this requirement as the "all or nothing rule".[31] SNPL's contention that the primary judge's findings on liability offended the principle in *Tabet v Gett* are baseless.

Causation

[23] SNPL contends that the evidence did not support the judge's conclusion that the paucity of SNPL's advice to Ms Papa and Dr Powell was the cause of Ms Papa's stroke; there was no evidence she would have followed Dr Garrahy's

---

25 *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [169].
26 See [13]-[14] of these reasons.
27 *Papa v Sullivan & Nicolaides Pty Ltd* [2010] QSC 364, [170]-[171].
28 Above, [172].
29 (2010) 240 CLR 537.
30 (1990) 169 CLR 638, Deane, Gaudron and McHugh JJ, 642-643 and Brennan and Dawson JJ, 639.
31 (2010) 240 CLR 537, 578 [113], 588-589 [150].

recommendations once informed of the risks involved in them, particularly the very high risk of haemorrhage if her unstable INR levels spiked above 6.5.

[24] It is true there was no direct evidence of the precise warnings of risk Dr Garrahy would have given Ms Papa before implementing the alternative anti-coagulation treatment he would have recommended. It may be inferred he would have met his duty of care to Ms Papa and explained that the treatment he proposed carried a real risk of haemorrhage if her INR rose well beyond her therapeutic range as it had in late January and early February. As Dr Garrahy gave no evidence as to the terms of any hypothetical warning, it is not surprising that Ms Papa did not give evidence as to how she would have responded to it. It seems this issue was not actively litigated at trial or explored by counsel for either party and that is why there was no evidence about it. In these circumstances, the rule in *Jones v Dunkel*[32] did not require an inference to be drawn against Ms Papa that, if she had been warned of the possibility that the treatment Dr Garrahy would have proposed included a risk of a sudden steep spike in INR levels thereby greatly increasing the possibility of haemorrhage, perhaps even serious or life threatening haemorrhage, she would not have undertaken the recommended treatment.

[25] The clear inference from Dr Garrahy's evidence was that he would have recommended to Ms Papa that she undertake the treatment he proposed, and that he would have recommended such treatment despite its risks. After all, the whole point of placing Ms Papa on anti-coagulant medication was to lower her risk of thromboembolism by thinning her blood, following the installation of an artificial mechanical mitral valve in her heart. Dr Garrahy had been Ms Papa's treating cardiologist since 1999. He considered that her situation as at 22 February was clinically a "red alert" as she was, with her valve replacement and a continued low INR below 2, at great risk of stroke through thrombolembolism. It can be inferred from his evidence that, in lay terms, as at 22 February her blood needed to be urgently thinned by a Warfarin alternative to reduce her risk of clots causing a stroke or possible death, and that this was Dr Garrahy's recommended treatment, even though it involved the real risk of serious or even deadly haemorrhage if her blood became too thin. Dr Powell gave evidence that Ms Papa was a patient who followed his treatment recommendations. Ms Papa gave evidence that she would have listened to expert medical advice and followed recommendations. It can safely be inferred that Ms Papa would have followed Dr Garrahy's recommendations despite being informed of the risk the treatment carried. As Martin J explains in his reasons,[33] although there was contradictory evidence, there was a body of cogent evidence which the trial judge was entitled to accept that, had Dr Garrahy implemented his proposed monitoring of an anti-coagulative treatment alternative to Warfarin, Ms Papa would have accepted that treatment, despite being informed of its risks, and would not have suffered a stroke.

Conclusion

[26] His Honour correctly identified the apposite legal principles[34] and applied them to his findings of fact, which were all open on the evidence, in reaching his conclusion that SNPL breached its duty of care to Ms Papa and that this was causative of her

---

32 (1959) 101 CLR 298, 308, 312, 320-321.

33 See Martin J's reasons at [143]-[170].

34 See [2] of these reasons.

injuries. For these reasons, as well as those given by Martin J, SNPL has not demonstrated the primary judge erred in his findings, reasons and conclusions.

[27] I agree with Martin J that the appeal should be dismissed with costs.

[28] **MARGARET WILSON AJA:** I respectfully adopt the President and Martin J's summaries of the facts and the trial judge's findings.

[29] I agree with their Honours that the trial judge was correct in not characterising the respondent's claim as one for the loss of a chance of a better medical outcome. I also agree with their Honours that the trial judge's finding that the appellant breached its duty of care to the respondent was open on the evidence, although I wish to make some further observations in relation to that.

[30] I respectfully disagree with the President and Martin J's conclusion in relation to causation. In my view the respondent failed to prove that the appellant's breach of duty caused her to suffer a thrombotic stroke on 1 March 2002. For this reason, I would allow the appeal.

Duty of care

[31] The trial judge found that the appellant's haematologist Dr Rowbotham did not breach her duty of care by not implementing an alternative or supplementary therapy. He found that it would have been inappropriate for a haematologist to supplement Warfarin with Clexane or unfractionated Heparin, or with "Stat" doses of Warfarin.

[32] His Honour concluded that the appellant's negligence lay in not recommending to the general practitioner that he investigate alternative therapies, and that he do so in consultation with the respondent's cardiologist Dr Garrahy.

[33] It is true, as senior counsel for the appellant submitted, that of the medical practitioners who gave evidence, only Professor Fox, a haematologist, referred to the desirability of involving the respondent's cardiologist. That evidence was relevant to the advice the appellant should have given to the respondent's general practitioner.

[34] It was for the Court to determine the content of the duty of care in all the circumstances, and evidence of professional practice could not be determinative of it.[35]

[35] Usually it is for a general practitioner to refer a patient to a specialist, and specialist to specialist referrals are somewhat unusual. But in the respondent's case her cardiologist was part of a network of practitioners attending to her ongoing care. While her general practitioner was her primary caregiver and the one who wrote prescriptions for Warfarin, the appellant was responsible for testing her anti-coagulation levels and adjusting the dosages of Warfarin, and her cardiologist reviewed her periodically.

[36] His Honour's finding was not expressed in terms that the appellant ought to have canvassed any particular alternative or supplementary forms of anti-coagulation with the general practitioner. By his further finding that the appellant ought to have

---

35 *Rogers v Whitaker* (1992) 175 CLR 479; *Rosenberg v Percival* (2010) 205 CLR 434, 439 per Gleeson CJ.

suggested that the general practitioner investigate other forms of therapy in consultation with the cardiologist, his Honour signalled that the seriousness and complexity of the respondent's situation were such that her further management required skill and judgment beyond what could reasonably be expected of a haematologist or a general practitioner, and that the appellant ought not only to have recognised that but also to have alerted the general practitioner to it.

[37] In the circumstances, I do not accept the submission of senior counsel for the appellant that there was a logical inconsistency between his Honour's finding that the appellant was not negligent in not instituting Clexane or unfractionated Heparin therapy, but that it was negligent in not recommending that the general practitioner undertake investigations which might result in the institution of one or other of those therapies. Nor do I accept that his Honour imposed a standard of care that was too high.

Causation

[38] The trial judge held that the appellant ought to have given certain information and advice to the respondent and to her general practitioner once it was apparent that her INR levels were consistently sub-therapeutic. His Honour considered that that would have been, at the latest, at the time of the INR reading of 1.5 on 22 February 2002.

[39] His Honour considered the appellant should have–

(a) informed the respondent of the unstable history of INR readings and of the persistent sub-therapeutic levels;

(b) informed her of (or at least reaffirmed) the risks associated with sub-therapeutic INR readings;

(c) informed her that dosage levels were being incrementally increased in an attempt to bring her INR back into the target range; and

(d) advised her that she should consult her general practitioner about management of the risks associated with her sub-therapeutic INR levels.

[40] His Honour considered that the appellant should have contacted the respondent's general practitioner, Dr Powell –

(a) to ensure he was aware of the respondent's persistent sub-therapeutic INR readings;

(b) to inform him of the dosage approach being adopted;

(c) to reaffirm the risks associated with the sub-therapeutic INR levels; and

(d) to recommend that he undertake or investigate management of those risks.

His Honour continued –

> "….when advising the GP to undertake or investigate management of the risks then faced by the [respondent], it would have been reasonably appropriate for the [appellant] at least to raise the

> prospect of the GP investigating alternative or supplementary forms of anti-coagulation and also to raise the prospect of this needing to be done in consultation with the [respondent's] cardiologist."

[41] His Honour was satisfied on the balance of probabilities that the appellant's failure to convey these matters to the respondent and her general practitioner by about 22 February 2002 caused her to suffer the thrombotic stroke on 1 March 2002. Analysis of the reasons for judgment reveals how his Honour reached that conclusion –

(a) If the general practitioner had received that advice and those recommendations by no later than 22 February 2002, he would have referred the respondent to her cardiologist Dr Garrahy;

(b) the respondent would have accepted and acted on that referral;

(c) Dr Garrahy would have been available to attend upon her virtually immediately;

(d) Dr Garrahy would have instituted the treatment regime he described in his evidence;

(e) "...if Dr Garrahy had instituted the therapeutic procedures he described in his evidence on, or shortly after, 22 February 2002 then it is more likely than not that the risk of the [respondent] suffering a thromboembolic incident would have been ameliorated, and accordingly it is more likely than not that she would not have suffered the stroke she did on 1 March 2002."

[42] His Honour identified matters he considered irrelevant to the determination of the causation question, namely –

(a) that another cardiologist, Dr Hossack, disagreed with Dr Garrahy's proposed treatment regime: in his Honour's view the question was what course of events would likely have followed if the appellant and GP had been given the advice he considered they should have been given;

(b) whether the response proposed by Dr Garrahy would have been that of a reasonable cardiologist in the circumstances: his Honour observed –

> "The fact is that if the [the respondent] had been referred back to him, that is the treatment he would have put in place."

(c) that Dr Garrahy's proposed treatment carried with it an increase (perhaps a significant increase) in the risk of the respondent suffering an haemorrhagic event: his Honour said –

> "But that was a risk to be managed by him as her treating cardiologist. His management of that risk is not a matter for present adjudication."

[43] Causation was a question of fact on which the respondent bore the onus of proof. It involved a hypothetical inquiry as to what would have happened if the appellant had

advised Dr Powell that alternative anti-coagulation therapies should be investigated in consultation with Dr Garrahy. The respondent had to persuade the trial judge on the balance of probabilities that she would have undertaken the treatment Dr Garrahy said he would have administered, and that she would not then have suffered the thrombotic stroke.

[44] The trial judge found that the respondent would have "accepted and acted on" the general practitioner's referral to Dr Garrahy. He did not expressly find that she would have consented to the treatment Dr Garrahy proposed, although this may be implicit in his finding that she would have "acted on" the referral.

[45] The principal plank of the appellant's attack on his Honour's determination of causation was that the respondent had not proved that she would have undertaken the therapy proposed by Dr Garrahy had she been warned of the risk of an haemorrhagic event associated with it.

The treatment Dr Garrahy would have administered

[46] Management of the anti-coagulation of the respondent's blood was fraught with risk of a thrombotic event at one extreme and risk of a haemorrhagic event at the other. The purpose of Warfarin therapy is to minimise those risks. Mortality is much higher in the event of a haemorrhagic stroke than in the event of a thrombotic stroke, and if the patient survives, the morbidity which follows a haemorrhagic event is much higher.

[47] The INR reading is a measure of the anti-coagulant effect of Warfarin. A high INR level is associated with the risk of a haemorrhagic event. A haemorrhagic stroke can occur at any INR above 3 or 4; there is a relatively high risk of it occurring at an INR of 7. In the event of a peak in the INR, there is an acute risk of a subsequent bleed over the next five days. There is a corresponding risk of a thrombotic stroke when the INR is below 2, although that risk is comparatively lower than the risk of a haemorrhagic stroke at the other end of the spectrum.

[48] A patient whose INR level is well controlled within the appropriate target range, may suffer a stroke – either a thrombotic stroke or a haemorrhagic stroke.

[49] Warfarin and Heparin are distinct anti-coagulant therapies; they operate down different pathways. Warfarin is usually administered in tablet form, and its effect is not completely eliminated until two to three days after it is administered. Unfractionated Heparin is administered intravenously or subcutaneously; its anti-coagulant effect lasts one to two hours. Clexane is a low molecular weight form of Heparin; its anti-coagulant effect lasts about 24 hours.

[50] There was no evidence of there being any recognised measure of the combined effect of Warfarin therapy and Heparin therapy.

[51] The respondent's INR levels had been erratic. There had been dangerous spikes of 5.9 on 3 January 2002, 5.7 on 10 January 2002, 6.5 on 24 January and 7 on 9 February 2002. The last of these had been followed by persistently low levels: 2.4 on 13 February 2002, 1.5 on 16 February 2002, 1.6 on 19 February 2002 and 1.5 on 22 February 2002. The reason for the instability was not established.

[52] Management of the respondent's condition called for clinical judgment balancing risks against benefits. There was a risk of excessive anti-coagulation and

haemorrhage. This was particularly so in light of the respondent's history of erratic INR levels and previous spikes when the dosage of Warfarin reached 3.71 mg per day, although her INR level had been relatively stable at sub-therapeutic levels for some days.

[53] In his report dated 19 November 2008 Dr Garrahy said that on 19 February 2002, when the respondent had a second sub-therapeutic INR level, appropriate advice would have been either to institute sub-cutaneous Clexane (1 mg per kg twice daily) or for her to be admitted to hospital for intravenous unfractionated Heparin infusion. In oral evidence, he acknowledged that there were risks associated with each of these therapies, and that the product literature did not recommend administering Clexane to patients with prosthetic valves. He said he would have had the respondent admitted to hospital where he would have given her unfractionated Heparin intravenously as a bridging therapy[36] in addition to Warfarin. He said he would have managed the competing risks by close supervision of the medications, specifically to avoid a sudden spike in the INR to 7. He would have gradually increased the dosage of Warfarin and when the INR went beyond 2, he would have ceased the Heparin. He did not suggest the addition of any further drug therapy to reverse excessive anti-coagulation.

The respondent's evidence

[54] The respondent gave the following evidence of what she would have done had she been given the advice the trial judge found the appellant should have given her[37]–

> "If between the 13th day of February 2002 and the 27th day of February 2002 a person from Sullivan & Nicolaides recommended to you that you should consult your general practitioner or cardiologist regarding any particular matter of concern, what would you have done?-- I would have done that immediately.
>
> If at any time during that period it was recommended to you that you return to your cardiologist what would you have done?-- I would have returned to my cardiologist.
>
> If any person from Sullivan & Nicolaides had contacted you during that period and made any treatment recommendations to you, what would you have done?-- I would have followed those recommendations.
>
> If you were called by a person from Sullivan & Nicolaides and told that you should consult your general practitioner or cardiologist about your subtherapeutic INR levels, what would you have done?-- I would have asked them to elaborate a little bit, explain to me why I needed to do that, what the risks were to me and I would have gone and seen my GP or my cardiologist straight away.
>
> If upon seeing your GP or cardiologist they recommended certain treatment to you, what would you have done?-- I would have followed their recommendations.
>
> ...

---

36 AR 159-162.

37 AR 45-46.

> If you were told by Sullivan & Nicolaides between the 13th day of February 2002 and the 27th day of February 2002 that with subtherapeutic INRs continuing you were at an increased risk of suffering a stroke, what would you have done?-- I would have asked for some advice about what I should do, who I should go and talk to and I would have followed that advice, basically.
>
> And if that advice was to see your general practitioner or cardiologist?-- I would have gone to see them straight away."

The appellant's submissions

[55] Senior counsel for the appellant submitted that the respondent had not proved causation. In oral submissions, he said –

> "Even if there was a breach of duty to advise… an investigation [of other forms of treatment], the onus is upon the [respondent] to demonstrate that such a breach caused her loss. She proved that had she or Dr Powell been so advised, they would have consulted Dr Garrahy. Dr Garrahy said that he would have seen her promptly if she was advanced to him as a high risk or urgent patient.
>
> However, she did not prove what investigations would than have been undertaken, what [the respondent] would have been advised in full terms, and what treatment… [she]... would have consented to if she had been properly advised. And that is essential to her case."

In written submissions counsel for the appellant said –

> "In making the finding at [170][38] that, if Mrs Papa had been referred back to Dr Garrahy, he would have put in place treatment constituting the administration of [heparin], his Honour overlooked that the evidence called on behalf of Mrs Papa elided two facts crucial to such a finding.
>
> First, neither Dr Powell nor Dr Garrahy was asked what advice he would have given to Mrs Papa as to the risks of administering [heparin] and the comparative risks of continuing cautiously to increase the doses of [warfarin]. Secondly, and more importantly, Mrs Papa was not asked whether she would have agreed to Dr Garrahy's proposed treatment regime if he or Dr Powell had properly explained to her the risks of such a regime and the comparative risks of ongoing gradual increases in [warfarin]."

[56] There is force in these submissions. As I shall explain, I consider that Dr Garrahy was obliged to advise the respondent about the risks inherent in the therapy he proposed, and of the alternatives open to her and their comparative risks. Whether she would have undertaken the treatment he proposed is, in my view, to be determined on the assumption he would have fulfilled that duty.

[57] Dr Garrahy was called by the respondent. Her counsel did not ask him what warning or advice he would have given her about the risk of a haemorrhagic stroke, and how he would have responded to her inquiries. Nor did he ask the respondent

---

38 AR 852.

what she would have done in the light of such warning or advice. The trial judge made no reference to the absence of such evidence. It was evidence which would have assisted his Honour in deciding whether to infer that she would have undertaken the therapy he proposed; counsel for the respondent's failure to ask about these matters may have made his Honour less inclined to infer from the other evidence that she would have undertaken the therapy Dr Garrahy proposed.[39]

Subjective approach to causation

[58] In Australia, the Court's approach to causation in a case such as this is subjective, in that it considers what the particular plaintiff, as opposed to a reasonable person in her position, would have done had she been given the advice she should have been given.[40]

[59] An injured plaintiff's assertion that she would have followed advice had it been proffered is self-serving, and usually needs to be treated with some caution. In *Ellis v Wallsend District Hospital*[41] Samuels JA (with whom Meagher JA agreed) said –

> "It is, of course, true that a patient's evidence about what he or she would have done if told of certain risks may be coloured by the fact that the risks did in fact eventuate; but it is open to a court to disbelieve evidence found to be tainted by hindsight: Manderson, "Following Doctors' Orders: Informed Consent in Australia" (1988) 62 ALJ 430 at 434. Obviously, in endeavouring to ascertain what the plaintiff's response would have been to adequate information had it been conveyed at the appropriate time, a court will be greatly assisted by evidence of the plaintiff's temperament, the course of any prior treatment for the same or a like condition, the nature of the relationship between patient and doctor including pre-eminently, so far as it can be established, the degree of trust reposed in the doctor by the patient. The extent to which the procedure was elective or imposed by circumstantial exigency and the nature and degree of the risk involved will all be matters of considerable importance: see Robertson, "Informed Consent to Medical Treatment" (1981) 97 LQR 102 at 122."

[60] In *Arndt v Smith*[42] a woman contracted chickenpox during pregnancy and subsequently gave birth to a child with a congenital injury attributable to the chickenpox. She sued her physician for the cost of raising the child, alleging that had she been told of the risk to her unborn child, she would have sought an abortion. The trial judge dismissed the action, finding that causation had not been proved. His decision was upheld by the Supreme Court of Canada. By majority the Supreme Court adopted an objective approach to causation. McLachlin J disagreed with the majority on the proper approach, although she agreed in the ultimate outcome. Her Honour treated the issue as subjective. She said –

> "[42] The physician's failure to advise constitutes a failure to take an action required by law. A finding of breach is a finding

---

39 *Kuhl v Zurich Financial Services Australia Ltd* (2011) 243 CLR 361, 384 – 385,, [63] – [64];.See, too, *Jones v Dunkel* (1959) 101 CLR 298.

40 *Chappel v Hart* (1998) 195 CLR 232, 272.

41 (1989) 17 NSWLR 553, 581.

42 (1997) 148 DLR (4th) 48.

> that the physician should have done something which he or she negligently failed to do. This, like the case of the employee injured as a result of the absence of a helmet required by law, raises the hypothetical question of what the plaintiff would have done had the physician discharged his or her duty. General tort principles suggest that this question is a purely factual inquiry to be answered by reference to all the evidence. This evidence may include evidence from the plaintiff at trial as to what she would have done. But it also includes relevant evidence of her situation, circumstances and mind-set at the time the decision would have been made. The trial judge must look at all the evidence and determine whether the plaintiff would have taken the suggested course on a balance of probabilities. One way of expressing this is to say that the plaintiff's hindsight assertion at trial of what she would have done is tested or evaluated by reference to the evidence as to her circumstances and beliefs at the time the decision would have been made. These circumstances include the medical advice she would have received at the time which might have influenced her decision. In this way, the plaintiff's subjective evidence as to what she would have done is evaluated by reference to the reasonableness of the competing courses of action. As Sopinka J (dissenting, but not on this ground) put it in *Hollis v Dow Corning Corp* [1995] 4 SCR 634, at p 689: …'the most reliable approach in determining *what would in fact have occurred* is to test the plaintiff's assertion by reference to objective evidence as to what a reasonable person would have done'….
>
> ...
>
> [44] The approach suggested by the fundamental principles of tort law is subjective, in that it requires consideration of what the plaintiff at bar would have done. However, it incorporates elements of objectivity; the plaintiff's subjective belief at trial that she would have followed a certain course stands to be tested by her circumstances and attitudes at the time the decision would have been made as well as the medical advice she would have received at the time."

[61] In *Rosenberg v Percival*[43] McHugh J said –

> "What a reasonable person would or would not have done in the patient's circumstances will almost always be the most important factor in determining whether the court will accept or reject the patient's evidence as to the course that the patient would have taken."

[62] In a case note on *Arndt v Smith* criticising the majority's adoption of an objective test, the scholar Honore wrote –

---

43 (2001) 205 CLR 434, 443.

> "To show after the event that she would have refused or demanded certain treatment a patient must show that she would at the time have had a reason for doing so. It is not enough to say retrospectively that she would have done so, but neither is she bound to demonstrate that an objectively 'reasonable' patient would have done so. Patients of full age and capacity have a right of self-determination in medical matters. And how often would the objectively unreasonable patient who believes in evil spirits sue and give evidence to that effect?"
>
> The finding in the *Arndt* case was clearly right, since the plaintiff badly wanted a child and was sceptical about medical intervention. It did not need the modified objective test of causation, as opposed to objectively credible evidence about the plaintiff's likely reaction, in order to reach that conclusion."[44] (Emphasis added.)

[63] As Samuels JA in *Ellis v Wallsend District Hospital* and McLachlin J in *Arndt v Smith* demonstrated, the issue is to be determined on all of the evidence. And the dictum of McHugh J in *Rosenberg v Percival* emphasises the importance of objective evidence in evaluating an injured plaintiff's assertion as to what she would have done.[45]

The respondent

[64] The respondent was an intelligent, well educated woman, then aged 45. She was married with two sons aged 18 and 20. Until her health deteriorated prior to the surgery, she was employed in responsible positions by Centrelink.

[65] The professional relationships between the respondent and Dr Powell, Dr Powell and Dr Garrahy, and the respondent and Dr Garrahy were well established before February 2002. Dr Powell was her general practitioner from about three years before her surgery. He referred her to Dr Garrahy before the surgery, which was performed by Dr Terence Mau, a cardiac surgeon, at the Princess Alexandra Hospital, on 11 July 2001. It was Dr Mau who first referred the respondent to the appellant, and thereafter it was Dr Powell who wrote the prescriptions for Warfarin. But Dr Garrahy continued to be involved by reviewing her periodically.

[66] When she was placed on Warfarin, the respondent read the literature supplied to her by the appellant, and she maintained an intelligent interest in her treatment and progress. She recalled one occasion when she rang the appellant for her INR results and was told there had been a dramatic change; she asked the reason for the change, but none was proffered. When she was thinking of losing weight, she consulted Dr Powell because she had previously been advised that changes in diet and weight could affect her INR levels. Dr Powell described her as a pleasant, affable and agreeable patient who followed his treatment recommendations.

[67] The respondent's evidence was that if the appellant had told her she should consult her general practitioner or cardiologist about her sub-therapeutic INR levels, she would have asked for further information – she would have asked why she needed to do so and the risks facing her, and then gone to see her general practitioner or cardiologist straight away. Indeed, when the appellant did call her on 27 February, she saw Dr Powell the next day.

---

44 Tony Honore, "Causation and disclosure of medical risks" (1998) 114 *Law Quarterly Review* 52, 55.

45 See Thomas Addison, "Negligent failure to inform: Developments in the law since *Rogers v Whitaker*" (2003) 11 *Torts Law Journal* 165, 182 – 183.

[68] The inference that she would have consulted Dr Garrahy promptly if her general practitioner had recommended she do so was easily able to be drawn in the circumstances. So, too, was the inference that if Dr Garrahy had warned her of the risk of excessive anti-coagulation that was inherent in the treatment he proposed, she would have explored that risk with him and inquired about the relative risks of continuing with carefully monitored and adjusted Warfarin therapy without the addition of another anti-coagulant or any other available therapy.

Dr Garrahy's duty to warn

[69] *Rogers v Whitaker*[46] was concerned with the duty of a medical practitioner to warn of the risks inherent in proposed treatment. The High Court held that the content of the duty of care is ultimately a matter for the court to determine; evidence of professional practice and opinion is relevant, but not conclusive. It said[47] -

> "The law should recognize that a doctor has a duty to warn a patient of a material risk inherent in the proposed treatment; a risk is material if, in the circumstances of the particular case, a reasonable person in the patient's position, if warned of the risk, would be likely to attach significance to it or if the medical practitioner is or should reasonably be aware that the particular patient, if warned of the risk, would be likely to attach significance to it. This duty is subject to the therapeutic privilege."

[70] While the High Court said that nothing was to be gained by reiterating expressions such as "the patient's right of self-determination" or "informed consent",[48] its formulation of the duty to warn of a material risk inherent in proposed treatment and of what is a material risk was clearly predicated on a patient's right to make an informed decision about whether to accept treatment. It endorsed the approach of Lord Scarman (in dissent) in *Sidaway v Board of Governors of the Bethlem Royal Hospital*[49] and that of King CJ in *F v R*.[50]

[71] In *Sidaway*[51] Lord Scarman said –

> "In my view the question whether or not the omission to warn constitutes a breach of the doctor's duty of care towards his patient is to be determined not exclusively by reference to the current state of responsible and competent professional opinion and practice at the time, though both are, of course, relevant considerations, but by the court's view as to whether the doctor in advising his patient gave the consideration which the law requires him to give to the right of the patient to make up her own mind in the light of the relevant information whether or not she will accept the treatment which he proposes." (Emphasis added.)

[72] In *F v R*, King CJ agreed with this passage from the judgment of the Supreme Court of Canada in *Reibl v Hughes*[52] –

---

46 (1992) 175 CLR 479.
47 At 490.
48 (1992) 175 CLR 479, 490.
49 [1985] AC 871.
50 (1983) 33 SASR 189.
51 At 876.
52 (1980) 114 DLR (3d) 1, 13.

> "To allow expert medical evidence to determine what risks are material and, hence, should be disclosed and, correlatively, what risks are not material is to hand over to the medical profession the entire question of the scope of the duty of disclosure, including the question whether there has been a breach of that duty. Expert medical evidence is, of course, relevant to findings as to the risks that reside in or are a result of recommended surgery or other treatment. It will also have a bearing on their materiality but this is not a question that is to be concluded on the basis of the expert medical evidence alone. The issue under consideration is a different issue from that involved where the question is whether the doctor carried out his professional activities by applicable professional standards. What is under consideration here is the patient's right to know what risks are involved in undergoing or foregoing certain surgery or other treatment." (Emphasis added.)

The High Court quoted with apparent approval King CJ's reference to "the paramount consideration that a person is entitled to make his own decisions about his life."[53]

[73] In *Rogers v Whitaker*, causation was not in issue before the High Court. But in considering causation in the present case, it should be assumed that Dr Garrahy would have fulfilled his duty of care to the respondent. It is relevant to consider what he ought reasonably to have told her. The risk of a haemorrhagic event was a material one, and so he would have been obliged to warn her of it. He would also have been obliged to respond to questions she asked about alternative therapies and their comparative risks.[54]

[74] I find some support for this approach in *Firth v Sutton.*[55] In that case an injured worker consulted a solicitor about her entitlement to lump sum compensation. He advised her about her entitlement pursuant to the workers' compensation scheme, without considering her common law rights. She accepted his advice, and agreed to a settlement. This involved forgoing her common law rights. Subsequently she sued her solicitor for negligence. The trial judge concluded that in failing to take reasonable steps to advance his understanding of any possible common law claim the solicitor had not discharged his duty, so as to enable his client to make an informed choice between common law and workers' compensation avenues of recovery. The Court of Appeal agreed.[56] No one gave evidence of what a reasonable solicitor would have advised on the existing medical evidence and the trial judge did not address the question.[57] Allsop P (with whom the other members of the Court of Appeal agreed) said –

> "The question of causation cannot… be answered until one understands what would, or could reasonably, have been put to [the client] about the comparative worth of the common law damages and the workers compensation entitlements."[58]

---

53 (1983) 33 SASR 189, 193. (See *Rogers v Whitaker*, 487).
54 See, e.g., *Arkinstall v Jenkins* [2001] QSC 421, and *Henderson v Low* [2001] QSC 496.
55 [2010] NSWCA 90.
56 At [97].
57 [103], [104], [107], [108].
58 [137].

His Honour then reviewed the relevant evidence and made a finding as to what the reasonable advice of a solicitor would likely have been. He took that advice into account in drawing the inference that the client would have proceeded at common law.

Other professional opinions

[75] Professional opinions differed on whether the therapy Dr Garrahy proposed should have been implemented, given the risk of excessive anti-coagulation.

[76] I do not agree with the trial judge that the fact Dr Hossack disagreed with Dr Garrahy's proposed treatment regime was really not to the point. Dr Hossack's evidence was relevant to the risks of which Dr Garrahy was obliged to warn the respondent.

[77] Dr Hossack described the therapy recommended by Dr Garrahy as "very high risk"; in his view the intravenous administration of unfractionated Heparin while a patient was still taking Warfarin would carry with it a serious risk of over anti-coagulation. He described it as "a very dangerous approach". He would not have introduced another anti-coagulant; he would have continued administering the Warfarin, cautiously adjusting the dosages.[59] That was precisely what the appellant had been doing.

[78] The treatment proposed by Dr Garrahy differed from that proposed by Professor Fox and Dr Davidson (both of whom were haematologists) in that he would have administered Heparin while continuing to administer Warfarin. Professor Fox gave evidence of the use of Clexane as a bridging therapy in a peri-operative setting. At least in that context, he would have dovetailed the medications, ceasing the Warfarin before administering Clexane. Dr Davidson, too, would have dovetailed the medications, because of the danger of excessive anti-coagulation and haemorrhage. Professor Fox and Dr Davidson described how excessive anti-coagulation may be controlled when it arises in consequence of the administration of Clexane, rather than unfractionated Heparin.

Conclusion on causation

[79] By 22 February 2002, the respondent's INR levels had been unstable for more than seven weeks. No reason for the instability had been found. The four most recent tests had revealed persistently low levels, consistent with the immediate risk being thrombotic stroke. But they had been preceded by dangerous spikes, consistent with the risk of a haemorrhagic stroke.

[80] There was a risk of excessive anti-coagulation inherent in the treatment proposed by Dr Garrahy. None of the other experts would have administered unfractionated Heparin at the same time as Warfarin, and there was no evidence of any recognised measure of the combined effect of the two therapies.

[81] Of course, the practice of medicine involves reliance on clinical judgements, not always able to be supported by scientific formulae. But the point is that Dr Garrahy would have been obliged to explain the alternatives and their comparative risks to the respondent, to allow her to make an informed decision: whether to undertake the

---

59 Evidence of Dr Hossack, AR 264-265; Report of Dr Hossack, AR 600-607.

therapy he proposed, or to continue on the course of carefully adjusted dosages of Warfarin, or to undertake some other therapy.

[82] On all the evidence, that the respondent, an intelligent, well educated and independently minded woman, would have undertaken the therapy proposed by Dr Garrahy was no more than speculative. Accordingly, the trial judge erred in finding that causation was established on the balance of probabilities.

[83] **MARTIN J:** In July 2001 Antoinette Papa had an artificial mechanical valve inserted in her heart. As a result, she was required to take anti-coagulant medication. The appellant ("SNPL") was engaged to analyse her blood and advise her on the correct dosage of that medication. On 27 February 2002 SNPL told Ms Papa that it would no longer perform those tasks. Two days later Ms Papa suffered a stroke which was caused by a blood clot. She has been severely disabled.

[84] Ms Papa sued SNPL claiming that it had been negligent in a number of respects. The learned trial judge rejected all the allegations of negligence save for the part of the claim that SNPL should have given certain advice to Ms Papa's general practitioner. He found that:

(a) SNPL had not given that advice;
(b) had it done so then Ms Papa's treatment would have been changed; and
(c) she would not have suffered the stroke.

[85] Ms Papa's damages were assessed at $2,201,982. The appellant contests the finding of liability but not the assessment of damages.

Background facts

[86] Ms Papa had suffered from mitral incompetence. The valve between the left atrium and left ventricle of her heart leaked. In order to remedy this she underwent surgery in July 2001 by a procedure in which an artificial valve was inserted in her heart.

[87] One of the consequences of this procedure is that it became necessary for her to take anti-coagulant medication for the rest of her life to help prevent the formation of clots around the valve or in her heart. The anti-coagulant prescribed was Warfarin.

[88] The levels of Warfarin in a patient's blood need to be monitored in order to ascertain whether they are within an appropriate therapeutic range and the dosages of Warfarin need to be adjusted in order to keep the Warfarin level within that range.

[89] SNPL is a firm of specialist medical pathologists. One of the services it has offered since 1999 is the Warfarin Care Service ("WCS"). The WCS takes samples of patients' blood and analyses them for the current Warfarin level. The patient is then advised by the WCS as to the dosage of Warfarin which he or she is to take until the next test and is also told when the next test is to be.

[90] The WCS, through SNPL, was engaged to monitor, analyse and advise on the respondent's Warfarin level.

[91] In the period of 13 to 25 February 2002 there were five occasions on which the blood tests showed that Ms Papa's Warfarin level was sub-therapeutic, that is,

below the target range of anti-coagulation. These levels indicated that the respondent was at an increased risk of developing blood clots.

[92] For reasons which are not relevant to this appeal, on 27 February 2002 SNPL told the respondent and her general practitioner (Dr Powell) that it would no longer monitor Ms Papa's Warfarin levels. In other words, she had been removed from the WCS.

[93] Dr Powell arranged to see the respondent on 28 February, when he gave her some general advice and referred her to another Warfarin monitoring service.

[94] On 1 March 2002, the respondent suffered a stroke (described as a "large right middle cerebral artery territory embolic infarction"), which was caused by an embolism, that is, a blood clot. Her initial symptoms following the stroke included:

(a) dense left hemiplegia;
(b) dysarthria;
(c) left VII cranial nerve upper motor neurone lesion; and
(d) cognitive impairment.

[95] The respondent has been left with severe spasticity affecting the left side of her body. She is able to mobilise with the aid of a walking stick. Her left arm is not functional, and her left leg is severely impaired. Her gait speed is slow and unsteady. She has cognitive difficulties, subtle concentration difficulties, and disturbance of the ability to carry out skilled voluntary movements. Her emotions and mood are labile and at times she suffers from depression.

[96] The plaintiff continues to suffer from the following incapacities:

- dense left hemiplegia;
- spasticity in the left upper and lower limbs;
- clawing of the toes;
- loss of left arm function;
- pins and needles in the left lower limb and left hand;
- general fatigue;
- left leg weakness;
- left calf pain and right knee pain on walking;
- left knee stiffness;
- intermittent urinary incontinence;
- poor balance;
- reduced concentration;
- some loss of short-term memory;
- a reduced capacity to engage in daily living activities; and
- surgical scarring from tendon release surgery.

[97] The learned trial judge assessed her damages at $2,201,982.

Warfarin levels, testing and alternative medication

[98] In order to understand the findings made by the learned trial judge it will assist if some basic information is set out which deals with Warfarin, its effects, how it is administered and the risks which can arise. This was done by the learned trial judge in the following extract from his reasons:

> "[11] Warfarin is an anti-coagulant, i.e. it interferes with the clotting properties of blood. It is taken daily in tablet form. There are varying strengths of tablet to enable a patient to

adjust dosage up and down, as they are advised to do so. Warfarin has been used as an anti-coagulant for many years. From the early 1990's, it was prescribed with increasing frequency as part of the treatment for patients suffering from the cardiac condition known as "atrial fibrillation".

[12] Warfarin levels in blood are monitored by a blood test which yields a number known as the "INR" (International Normalised Ratio). This is a standardised measure of the prothrombin level in blood. In lay terms, the INR provides a relative indication of the time it takes for a patient's blood to clot. In a person not taking Warfarin, the INR is 1. If a person is taking Warfarin, its anti-coagulant properties cause the blood to take longer to clot. If the particular patient's blood takes twice as long to clot, then they will have an INR of 2. Similarly, an INR of 7 indicates that the patient's blood will take seven times as long to clot.

[13] Target ranges are set by the referring physicians for the INR sought to be maintained for particular patients. It was not in issue in the present case that the INR target range set by the cardiac surgeon for this plaintiff was 3.0 – 4.0.

[14] Increased risks emerge for a patient if their INR drops below or exceeds the target range. If the INR drops to levels below the target range, the risk of the patient developing clots (including thromboembolisms) increases. If the INR exceeds the target range, the risk of the patient suffering from bleeding (including into the brain or spine) increases.

[15] As noted, the defendant set up the WCS in 1999. As at 2001-2002, the WCS was managing about 5,000 patients who were taking Warfarin. It was staffed by a clinical nurse manager, clinical staff, scientists and doctors.

[16] When the plaintiff was initially referred to the WCS, she was visited at home by a representative of the defendant and provided with a folder of documents. The plaintiff gave evidence that she read and understood the documents that had been provided to her. One of the documents in this kit was an information sheet, which provided the following description of the testing process:

"Your doctor will give you a request form to have a blood test called a 'Prothrombin Time' (PT) test. Under the current Medicare schedule this request form is valid for the period defined by your doctor up to a maximum of six months. You may go to any of our collection centres for this test. A list of collection centres is provided for your information. Our laboratory network covers an extensive area north, south and west of Brisbane. If you are physically unable to get to a collection centre through illness or disability, we can arrange a home visit service.

At each visit, before the blood is collected, we will ask you to fill out a simple form to record any changes that may

have occurred since your last test. To help us provide you with the best possible care, we need to know of any illnesses such as diarrhoea or vomiting, planned procedures (such as dental extractions or surgery), or changes to medication (the list of medications that interact with Warfarin is extensive).
Also, please inform us of any unexplained bruising, nose bleeds, if you have heavy bleeding from your gums after brushing, prolonged bleeding from small cuts, urine that is dark brown or contains blood, bowel movements that contain blood or appear black, or any other information that you think may be relevant.
You do not need to fast prior to collection unless you have been instructed to fast for other tests to be collected at the same time as your PT. If for some reason you have not taken your Warfarin as prescribed, remember to mention this to our staff. We will then take this into account when looking at the results of your test and ensure that your dose schedule will not be changed unnecessarily.
After your blood is collected, it is sent to the laboratory for testing. A scientist at the laboratory will refer your results to one of our highly trained pathologists. The pathologist will adjust your Warfarin dose as required (based on this day's results, your previous test results and doses, your medical condition for which you are on Warfarin, and any other relevant information that you gave us when you filled out the form mentioned above). You can access your dosage instructions after 4pm on the day of your test allowing 5 hours for your specimen to be processed."

[17] This information sheet, and other forms in the information kit, also emphasised:

(a) The importance of the patient maintaining a steady diet and avoiding large variations;

(b) The advisability of taking the Warfarin regularly once a day and at about the same time each day;

(c) The necessity to check with the prescribing practitioner or the defendant's clinical nurse manager before taking herbal preparations and other medication;

(d) The necessity (highlighted in the passage quoted above) for the patient to report illnesses, medication taken and any unexplained bruising or bleeding.

[18] In respect of each sample of blood taken from the patient, the blood would be tested for its INR, and the results referred to one of the defendant's haematologists for that specialist to review the result and fix the dosage to be advised to the patient. Dr Rowbotham, the defendant's haematologist assessed the plaintiff's results in late February 2002, described the information which was then available to the defendant's haematologists as follows:

> "How is the information from a pathology test produced for the haematologist or how was it produced in 2001, 2002?-- We had a specific database designed for the Warfarin dosing program and on that screen the patient's name, date of birth, the referring doctor, the indication for Warfarin therapy, the medical history, the current list of medications would all be at the top of the screen, the target range and any other information which was relevant to Warfarin treatment. There then would be 16 results on the screen at that time of INRs and doses for us to look at and by scrolling back you could get back right to the start of a patient's Warfarin therapy. So you would see the INR result of the day, you would know the previous result and whether or not it had been in range and you would know the interval between the tests and you would also be able to see whether or not the patient had supplied any information on the patient information form which they filled out every time they presented for a blood test."

[19] Clinical comments relevant to these entries were also accessed on this screen. These clinical comments included all information which the patient provided in respect of matters such as bruising or bleeding, other medication and other illnesses from which they were suffering. On some 35 occasions between 18 July 2001 and 25 February 2002, the WCS tested the plaintiff's blood to ascertain the INR and then advised her of the doses of Warfarin she was to take until her next test. For present purposes, it is sufficient to set out a table containing the test results and instructions given for December 2001 and January and February 2002. (This table also converts the dosing instruction into the average daily dose administered in accordance with the dosing instructions given from time to time and the dates on which the plaintiff was instructed to return for her next test.)"

Date	**INR**	**Dose instruction**	**Average daily dose**	**Next test**
6.12.01	3.00	7.7 mg daily	7.00	3.01.02
3.01.02	5.90	Nil Thursday, Friday 6.0 mg others	6.00	7.01.02
7.01.02	2.80	5.5 mg	5.50	10.01.02
10.01.02	5.70	Nil Thursday, Friday 4.0 mg others	4.00	14.01.02
14.01.02	3.40	4.0 mg daily	4.00	17.01.02
17.01.02	3.80	4.0 mg Monday-Friday 3.0 mg others	3.71	22.01.02
24.01.02	6.50	Nil Thursday, Friday	0.00	26.01.02

26.01.02	3.30	3.0 mg daily	3.00	30.01.02
30.01.02	2.00	4.0 mg Monday-Friday 3.0 mg Saturday, Sunday	3.71	6.02.02
9.02.02	7.00	Nil Saturday, Sunday, Monday	0.00	12.02.02
13.02.02	2.40	2.5 mg daily	2.50	15.02.02
16.02.02	1.50	3.0 mg daily	3.00	19.02.02
19.02.02	1.60	3.0 mg Monday, Wednesday, Friday 3.5 mg Tuesday, Thursday, Saturday, Sunday	3.28	22.02.02
22.02.02	1.50	3.5 mg Monday-Friday 4.0 mg Saturday, Sunday	3.64	25.02.02
25.02.02	1.80	4.0 mg daily	4.00	Discharged

[99] A substantial amount of expert evidence was adduced relating to the proper care of a person in Ms Papa's position with the INR readings which were collected in January and February. Evidence was also given relating to the possible use of Clexane or Heparin.[60]

[100] From that evidence his Honour drew[61] the following propositions relevant to Warfarin control by specialist Warfarin care haematologists in 2002:

(a) that the Warfarin dosage management process necessarily involved a balancing of the risk of under anti-coagulation and over anti-coagulation;

(b) that there was a known risk of thromboembolic event in the case of sub-therapeutic INR levels, and that this risk magnified when the INR was at or below 1.5;

(c) that there was a known risk of haemorrhagic event in the case of supra-therapeutic INR levels, and that this risk magnified very significantly when the INR was at or above 6.5;

(d) that in relative terms, the risk of an haemorrhagic event at INR 6.5 or higher was significantly greater than the risk of thromboembolic event at INR 1.5 or less;

(e) that the process of Warfarin dosage management with a view to keeping the INR within target range, and thereby minimising these risks, necessarily involved a significant component of clinical judgment on the part of the Warfarin care haematologist;

(f) that it was accepted practice at the time that the anti-coagulants Clexane or Heparin could be used on a patient with an artificial mitral valve as "bridging therapy" by way of a substitute for, or supplement to, Warfarin in a peri-operative setting;

(g) that neither the medical literature then available nor the standards of practice among Warfarin care haematologists at the time support a conclusion that it was appropriate for a Warfarin care haematologist, when

---

60 Heparin (or unfractionated heparin as it is sometimes called) is another type of anti-coagulant. Clexane is a form of low molecular weight heparin.

61 At [152] of the reasons.

dosing a patient with an artificial mitral valve who had a persistent sub-therapeutic INR, to supplement the prescription of Warfarin with either:

(i) the administration of Clexane or Heparin, or

(ii) the administration of "stat" doses or Warfarin.

[101] His Honour also concluded[62] "that there was not widespread support either amongst the haematologists or in the literature for the notions that a Warfarin care haematologist treating an artificial mitral valve patient with persistent sub-therapeutic INR ought to have resorted to the other anti-coagulants or "stat" doses. On the contrary, the general consensus amongst the experts was that the cautious approach of incremental increases in the Warfarin doses was appropriate."

The Plaintiff's Case at Trial

[102] Ms Papa's case at trial was that SNPL had been negligent in:

(a) treating her; and

(b) not advising her properly.

[103] After considering the expert evidence and associated material, the learned trial judge concluded that he "would not be prepared to find that it has been established that the defendant failed to exercise and observe the standards of a reasonable Warfarin care haematologist in the management of the plaintiff's Warfarin dosage levels in the period 13 – 27 February 2002."[63]

[104] His Honour then identified the other question of liability in these terms: "whether, according to the relevant professional and practicing [sic] standards at the time, the defendant, when presented with this artificial mitral valve patient with a recent history of INR instability and persistent sub-therapeutic INR's, ought to have given advice to the plaintiff, her GP or her cardiologist, and if so, what the content of that advice ought to have been and when it ought to have been given."[64]

[105] Findings were then made that SNPL should have made contact with Dr Powell to:

(a) ensure that he was aware of the plaintiff's persistent sub-therapeutic INRs;

(b) advise of the dosage approach being adopted;

(c) reaffirm the existence of the risks associated with the sub-therapeutic INR;

(d) recommend that he undertake or investigate management of the risks associated with the plaintiff's sub-therapeutic INR levels;

(e) raise the prospect of him investigating alternative or supplementary forms of anti-coagulation; and

(f) raise the prospect of this being done in consultation with Ms Papa's cardiologist (Dr Garrahy).

[106] SNPL did not give any of that advice.

[107] His Honour then found that it was more likely than not that:

(a) if Dr Powell had received that advice by 22 February, then he would have referred Ms Papa to Dr Garrahy;

(b) if that referral had been made, then Dr Garrahy would have instituted an identified treatment regime; and

---

62 At [153] of the reasons.

63 At [156] of the reasons.

64 At [157] of the reasons.

(c) if that regime had been instituted, then Ms Papa would not have suffered the stroke.[65]

[108] His Honour's conclusion was:

> "[172] In all the circumstances, then, I am satisfied on the balance of probabilities that the defendant's failure to give advice to the plaintiff and her general practitioner by about 22 February 2002 in respect of the matters outlined above was a breach of the defendant's duty of care to the plaintiff which was causative of her suffering the stroke on 1 March 2002. Accordingly, the plaintiff has proved her case of liability against the defendant."

The Appeal Grounds

[109] The appellant identified nine grounds in its Notice of Appeal in which it said the trial judge erred. In its written submissions SNPL grouped these under five broad headings:

(a) Loss of a chance;
(b) Liability finding contrary to the evidence;
(c) Finding of referral to cardiologist contrary to the evidence;
(d) No evidence of causation; and
(e) Use of hindsight.

It is convenient to use those headings here when considering the appellant's arguments.

Loss of a chance – Grounds 1 and 8

[110] In this part of the appeal the appellant identified two errors:

(a) the proper characterisation of Ms Papa's claim was that it was a claim for the loss of a chance of a better medical outcome; and
(b) it was wrong not to take into account a possible consequence of the respondent following the treatment advocated by her cardiologist, namely that she would have suffered substantial haemorrhaging.

[111] The appellant says that his Honour really only compared Ms Papa's medical outcome under the treatment she had been receiving with the outcome she might have had if she had been treated with heparin. In the latter case, there was a chance she would have had a better outcome. But, there was also a chance she would have had the same or a worse outcome. Thus, says the appellant, the learned trial judge must have made a comparison of her possible outcome under SNPL's treatment and the outcome she might have had had she been treated with heparin. The argument follows that, accepting that SNPL was negligent in not advising Ms Papa in the terms set out in [105] above, then a consideration of the difference between the state of affairs after SNPL's negligence and that which would have existed had it given Ms Papa the relevant advice, must necessarily involve the consideration of what medical outcome of the alternative treatment was more probable than not.

[112] Further, it is argued that, by failing to take into account the likely consequence of undertaking the treatment advocated by her cardiologist, namely a far worse outcome, and notwithstanding the chance that she would have had a better medical

---

65 At [169] – [171] of the reasons.

outcome the learned trial judge erred in not holding that the respondent's case was, in truth, a claim for the loss of a chance of a better medical outcome.

[113] If the appellant is correct, then the respondent's case should have been dismissed because the loss of a chance of a better medical outcome is not compensable by damages: See *Tabet v Gett.*[66]

[114] To consider this part of the appellant's case it is appropriate, first, to consider the case presented at trial. In the Further Amended Statement of Claim ("FASOC") the plaintiff pleaded (so far as is relevant):

> "20. The plaintiff's stroke and the consequence thereof were suffered as a result of the negligence and/or alternatively breach of contract of the defendant, its servants or agents.
>
> **PARTICULARS**
>
> (a) failure to do anything other than increase the dose of warfarin during the period 13 – 27 February 2002;
>
> (b) failure to adequately and properly communicate the difficulty in controlling the plaintiff's INR to the plaintiff and/or alternatively to the plaintiff's general practitioner and/or alternatively to the plaintiff's cardiologist, either orally or in writing, and particularly during the period 13 – 27 2002, when repeated sub-therapeutic readings were obtained on 13, 16, 19, 22 and 25 February, and when there was a considerably increased risk of thromboembolism, and when the plaintiff's history suggested or indicated that the re-establishment of control could be prolonged;
>
> (c) failure to recommend to, request or advise the plaintiff's general practitioner and/or cardiologist, either orally or in writing, that the plaintiff should be started on Heparin or Clexane, and/or alternatively failing to advise the plaintiff's general practitioner and/or cardiologist that they should consider starting the plaintiff on Heparin or Clexane given that repeated sub-therapeutic readings were obtained on 13, 16, 19, 22 and 25 February 2002 and when there was a considerably increased risk of a thromboembolism and when the plaintiffs history suggested or indicated that re-establishment of control could be prolonged;
>
> (d) failure to adequately and properly advise the plaintiff that she was at a considerably increased risk of thromboembolism, when repeated sub-therapeutic readings were obtained on 13, 16, 19, 22 and 25 February 2002;
>
> (e) failing to make any or any proper or reasonable attempt or attempts to determine or ascertain or

---

66 (2010) 240 CLR 537.

alternatively have determined or ascertained whether there was an underlying medical reason for the instability of the INR;

(f) failing to advise or adequately and properly advise the plaintiff that:

(i) from 3 January 2002 to 27 February 2002 there was extreme difficulty in managing the plaintiff's care with INR response to a prescribed dose of warfarin of 3-4mg varying from 1.50 to 7.0; and/or

(ii) during the period 13 - 27 February 2002 repeated sub-therapeutic readings were obtained on 13, 16, 19, 22 and 25 February which gave rise to a considerably increased risk of thromboembolism with potential disastrous complications such as a stroke; and/or

(iii) the plaintiff should seek medical and/or alternatively specialist medical opinion to determine whether there was an underlying medical reason for the instability of the INR.

(g) permitting and allowing the plaintiff to remain exposed to a considerably increased risk of thromboembolism with potential disastrous complications such as a stroke, that could have been avoided by the exercise of reasonable care on its part;

(h) failing to observe or appreciate that the plaintiff was in a position of peril as a consequence of being exposed to a considerably increased risk of thromboembolism with potential disastrous complications such as a stroke, which in fact occurred to the plaintiff.

21. Had the defendant advised the plaintiff and/or alternatively the plaintiffs general practitioner and/or alternatively the plaintiffs cardiologist of any or all of the matters referred to in paragraph 20 above, the plaintiff would have heeded and acted upon such advice, particularly given the considerably increased risk of thromboembolism with sub-therapeutic INR with potential disastrous complications such as a stroke.

22. Further, or in the alternative, had the defendant given any or all of the advice referred to in paragraph 20 hereof to the plaintiff, the plaintiff's general practitioner and/or, the plaintiff's cardiologist, Heparin or Clexane would have been added to the plaintiff's warfarin therapy as a consequence of which she would not have suffered the stroke."

[115] The pleading then goes on:

"23. Further, on the alternative, as a consequence of the defendant's negligence, the plaintiff suffered a significant loss of chance or opportunity of receiving reasonable and

> appropriate treatment, such as the addition of Heparin or Clexane to her warfarin therapy, which would have eliminated or alternatively significantly reduced the prospects of the plaintiff suffering a stroke."

[116] The "loss of a chance" was the alternative claim made by the plaintiff. When the trial was conducted the High Court had not delivered judgment in *Tabet v Gett*.[67] The parties recognised the possible effect of the decision and, as his Honour records in footnote 1 of his reasons:

> "The alternative basis on which the plaintiff's case was presented, i.e. for having suffered a loss of chance or opportunity of receiving reasonable and appropriate treatment which would have eliminated or reduced the prospects of suffering a stroke is clearly no longer maintainable in light of the judgment of the High Court in *Tabet v Gett* [2010] HCA 12. That case was argued in the High Court while judgment in this matter was reserved and the parties requested that I refrain from delivering judgment in this matter until the decision in the High Court was known and the parties had the opportunity to make further submissions."

[117] It is pellucid that the learned trial judge had been directed to and had considered the claim for loss of a chance, and had disregarded it in the light of the High Court's decision.

[118] On the appellant's reasoning, the learned trial judge has, notwithstanding his clear disavowal of the claim for loss of a chance, nevertheless actually found for the respondent on that basis.

[119] In order to determine whether the learned trial judge made the error complained of it is appropriate to consider the manner in which his Honour assessed the evidence and whether he did so in accordance with the accepted test for whether compensable damage has occurred.

[120] In *Gregg v Scott*[68] Lord Nicholls of Birkenhead described the test in the following way:

> "[9] In the normal way proof of the facts constituting actionable damage calls for proof of the claimant's present position and proof of what would have been the claimant's position in the absence of the defendant's wrongful act or omission. As to what constitutes proof, traditionally the common law has drawn a distinction between proof of past facts and proof of future prospects. A happening in the past either occurred or it did not. Whether an event happened in the past is a matter to be established in civil cases on the balance of probability. If an event probably happened no discount is made for the possibility it did not. Proof of future possibilities is approached differently. Whether an event will happen in the future calls for an assessment of the likelihood of that event happening, because no one knows for certain what will happen in the future."

---

67 (2010) 240 CLR 537.

68 [2005] 2 AC 176, 181-182.

[121] In *Tabet v Gett*,[69] Gummow A-CJ identified the issue for the High Court in this way:

> "[25] In the present case, the Court of Appeal considered, and properly so, that it could only be for this Court "to reformulate the law of torts to permit recovery for physical injury not shown to be caused or contributed to by a negligent party, but which negligence has deprived the victim of the possibility (but not the probability) of a better outcome".
>
> …
>
> [27] These reasons will seek to demonstrate that the reformulation of which the Court of Appeal spoke should not be made, and that the appeal to this Court must fail. However, this outcome will not require acceptance in absolute terms of a general proposition that destruction of the chance of obtaining a benefit or avoiding a harm can never be regarded as supplying that damage which is the gist of an action in negligence.
>
> …
>
> [30] The appellant sought to stigmatise the respondent's case as being that, because the likelihood of this better outcome was less than 50 per cent, it followed (a) that on the balance of probabilities the appellant would still have suffered as much as she did, and therefore (b) the chance, prospect or opportunity had no worth.
>
> [31] However, if the likelihood of a better outcome had been found to be greater than 50 per cent then on the balance of probabilities the appellant would have succeeded, not failed, on the main branch of her case in negligence. The question of principle thus becomes whether the law permits recovery in negligence on proof to the balance of probabilities of the presence of something else, namely a chance, opportunity or prospect of an outcome the eventuation of which, however, was less than probable."

[122] Hayne and Bell JJ referred to *Gregg v Scott* when they said:[70]

> "[66] For the purposes of the law of negligence, 'damage' refers to some difference to the plaintiff. The difference must be detrimental. What must be demonstrated (in the sense that the tribunal of fact must be persuaded that it is more probable than not) is that a difference has been brought about and that the defendant's negligence was a cause of that difference. **The comparison invoked by reference to 'difference' is between the relevant state of affairs as they existed *after* the negligent act or omission, and the state of affairs that would have existed had the negligent act or omission not occurred**." (emphasis added)

---

69 (2010) 240 CLR 537, 553-555.

70 Ibid, 564..

…

> "[68] As Gummow A-CJ explains, to accept that the appellant's loss of a chance of a better medical outcome was a form of actionable damage would shift the balance hitherto struck in the law of negligence between the competing interests of claimants and defendants. That step should not be taken. The respondent should not be held liable where what is said to have been lost was the possibility (as distinct from probability) that the brain damage suffered by the appellant would have been less severe than it was."

[123] Where it is found that a particular event was more likely than not to have occurred, then the law raises that finding to a certainty. As Kiefel J (with whom Hayne, Crennan and Bell JJ agreed on this point) said:[71]

> "[113] **Once causation is proved to the general standard, the common law treats what is shown to have occurred as certain**. The purpose of proof at law, unlike science or philosophy, is to apportion legal responsibility. That requires the courts, by a judgment, to "reduce to legal certainty questions to which no other conclusive answer can be given". The result of this approach is that when loss or damage is proved to have been caused by a defendant's act or omission, a plaintiff recovers the entire loss (the "all or nothing" rule).
>
> …
>
> [150] **When an issue is proved to the general standard the court treats the damage caused as certain, thus giving rise to the all-or-nothing rule of recovery.** The rule is strongly criticised by those who favour acceptance of loss of chance as damage. However, the rule reflects the certainty that the law considers to be necessary when attributing legal responsibility for harm caused. To replace it with a rule which limits damages awarded according to the degree of probability of causation has its own limitations. It would suggest, if not require, a degree of precision in the assessment of probabilities which is not part of the more liberal, common sense, approach presently undertaken. And, as Baroness Hale of Richmond observed in *Gregg v Scott*, proportionate recovery cuts both ways." (emphasis added) (footnotes omitted)

[124] The appellant's contentions are not supported by an analysis of his Honour's reasons. He did compare "the relevant state of affairs as they existed *after* the negligent act or omission, and the state of affairs that would have existed had the negligent act or omission not occurred".[72] He then found, on the balance of probabilities that, had SNPL given the respondent the appropriate advice, then certain events would have occurred and she would not have suffered the stroke. The complaint made by the appellant is more properly categorised as a complaint about

---

71 Ibid, 578, 588-589.

72 Ibid, 564..

the way in which the learned trial judge went about the fact finding exercise. It is argued that he could not have come to the conclusion he did had he taken into account certain evidence, namely, that which related to the possibility of Ms Papa suffering a haemorrhage. That is considered later in these reasons, but, assuming the appellant's contention is correct, that does not mean that his Honour's finding was based on the loss of a chance.

Liability finding contrary to the evidence – Grounds 2, 3 and 4

[125] Under this heading the appellant attacks the following findings made by his Honour:

> "[167] Whilst it was not, for the reasons I have given above, appropriate for the defendant itself to instigate alternative treatment with Clexane or Heparin, it seems to me, in the circumstances of this case, that when advising the GP to undertake or investigate management of the risks then faced by the plaintiff, **it would have been reasonably appropriate for the defendant at least to raise the prospect of the GP investigating alternative or supplementary forms of anti-coagulation and also to raise the prospect of this needing to be done in consultation with the plaintiff's cardiologist**.
>
> [168] In reaching this conclusion, I draw not merely on the consistent evidence among the experts as to the desirability of appropriate communication between the Warfarin care haematologist and the patient and the patient's GP, but also Dr Davidson's evidence to the effect that not all GP's are up to date in managing complex anti-coagulation problems and would probably need some guidance. A fortiori in a case such as the present, which Dr Rowbotham described as having presented her with a "difficult management problem" because of the need to balance the risks of a thromboembolic event and an haemorrhagic event, and which involved a patient with an artificial mitral valve who in the weeks immediately preceding the persistent sub-therapeutic levels had demonstrated INR instability. In my view, **a reasonable Warfarin care provider would have given the kind of advice and guidance to which I referred in para [167], as part of the guidance expected of and from a specialist Warfarin care service. The giving of this advice and guidance did not involve questions of clinical judgment. By not communicating this advice to the plaintiff and this advice and guidance to her GP, the defendant failed to meet the standard of care required of a reasonable Warfarin care haematologist**." (emphasis added)

[126] These determinations were based upon, and had been preceded by, these matters:

> "[163] Having regard to the situation of this particular plaintiff, with an artificial mitral valve which of itself dictated caution in respect of the risk of clotting and a recent history of INR instability, and also having regard particularly to the

> evidence of both Professor Metz and Professor Eikelboom as to the desirability, if not the necessity, to communicate with the patient, I consider that a reasonable Warfarin care haematologist in the position and having the knowledge of the defendant would have contacted the plaintiff:
>
> (a) To advise of the unstable history of INR readings and of the persistent sub-therapeutic levels;
>
> (b) To advise (or at least reaffirm) the risks associated with sub-therapeutic INR readings;
>
> (c) To advise of the approach which was being adopted to incrementally increase dosage levels in an attempt to bring her INR back into range;
>
> (d) To advise the plaintiff that she should consult her G P with respect to management of the risks associated with her sub-therapeutic INR levels."

[127] SNPL did not provide any of that advice to the respondent. This part of his Honour's reasons was not the subject of criticism yet it is the basis upon which the later findings (in [167] and [168]) were made.

[128] The appellant submits that there was no basis for the learned trial judge to conclude that it had a duty to consider, and to advise Ms Papa or Dr Powell, that they investigate alternative or supplementary forms of anti-coagulation. This, it was said, is the inevitable conclusion to be drawn where there were no suitable alternatives available. It is on that point that this part of the appellant's case turns, but before I consider whether there was evidence to support his Honour's conclusions I will briefly refer to the authorities which deal with the duty of care of a medical practitioner.

[129] In *Rogers v Whitaker*[73] the duty was explained in this way:

> "The law imposes on a medical practitioner a duty to exercise reasonable care and skill in the provision of professional advice and treatment. That duty is a 'single comprehensive duty covering all the ways in which a doctor is called upon to exercise his skill and judgment'; it extends to the examination, diagnosis and treatment of the patient and the provision of information in an appropriate case. It is of course necessary to give content to the duty in the given case.
>
> The standard of reasonable care and skill required is that of the ordinary skilled person exercising and professing to have that special skill ..."[74] (footnotes omitted)

[130] The content of the duty of care to be observed is not static – it changes with the particular circumstances:

> "The duty of a medical practitioner to exercise reasonable care and skill in the provision of professional advice and treatment is a single comprehensive duty. However, **the factors according to which**

---

73 (1992) 175 CLR 479.

74 At 483, per Mason CJ, Brennan, Dawson, Toohey and McHugh JJ.

> **a court determines whether a medical practitioner is in breach of the requisite standard of care will vary according to whether it is a case involving diagnosis, treatment or the provision of information or advice;** the different cases raise varying difficulties which require consideration of different factors. Examination of the nature of a doctor-patient relationship compels this conclusion. **There is a fundamental difference between, on the one hand, diagnosis and treatment and, on the other hand, the provision of advice or information to a patient**. In diagnosis and treatment, the patient's contribution is limited to the narration of symptoms and relevant history; the medical practitioner provides diagnosis and treatment according to his or her level of skill. ... *Whether* a medical practitioner carries out a particular form of treatment in accordance with the appropriate standard of care is a question in the resolution of which responsible professional opinion will have an influential, often a decisive, role to play ..."[75] (emphasis added)

[131] In order to determine the content of the duty in a particular case expert evidence as to the relevant professional practice and opinion is relevant to, but not conclusive of, that content.[76] In this case there was a substantial amount of such evidence and, on some important areas, there were differences of opinion or of emphasis.

[132] These principles were noted by the learned trial judge as well as the obligation to consider these matters prospectively and not with the benefit of hindsight. As Hayne J said in *Vairy v Wyong Shire Council* (2005) 223 CLR 422:

> "[105] The central issue in the appeal is whether the Council breached a duty of care it owed to the appellant by not erecting one or more signs warning against, or prohibiting, diving from the rock platform. Resolving that question, a question of fact, hinges critically upon recognising that **what has come to be known as the "*Shirt* calculus" is not to be undertaken by looking back at what has in fact happened, but by looking forward from a time before the occurrence of the injury giving rise to the claim**. …
>
> …
>
> [124] Again, because the inquiry is prospective, it would be wrong to focus exclusively upon the particular way in which the accident that has happened came about. In an action in which a plaintiff claims damages for personal injury it is inevitable that much attention will be directed to investigating how the plaintiff came to be injured. The results of those investigations may be of particular importance in considering questions of contributory negligence. But the apparent precision of investigations into what happened to the particular plaintiff must not be permitted to obscure the nature of the questions that are presented in connection with the inquiry into breach of duty. In particular, the examination of the causes of an accident that *has* happened cannot be equated with the examination that is to be undertaken when asking whether there was

---

75 At 489, per Mason CJ, Brennan, Dawson, Toohey and McHugh JJ.

76 *Rosenberg v Percival* (2001) 205 CLR 434, 439, 453-455.

> a breach of a duty of care which was a cause of the plaintiff's injuries. **The inquiry into the causes of an accident is wholly retrospective. It seeks to identify what happened and why. The inquiry into breach, although made after the accident, must attempt to answer what response a reasonable person, confronted with a foreseeable risk of injury, would have made to that risk**. And one of the possible answers to that inquiry must be "nothing".
>
> …
>
> [126] When a plaintiff sues for damages alleging personal injury has been caused by the defendant's negligence, **the inquiry about breach of duty must attempt to identify the reasonable person's response to foresight of the risk of occurrence of the injury which the plaintiff suffered. That inquiry must attempt, after the event, to judge what the reasonable person *would* have done to avoid what is now known to have occurred. Although that judgment must be made after the event it must seek to identify what the response would have been by a person looking forward at the prospect of the risk of injury."** (emphasis added) (footnotes omitted)

[133] With those principles in mind, I turn to the arguments advanced by the appellant under this general heading. His Honour had found, in addition to the matters set out in [12] above, that Ms Papa's situation was "a difficult situation for the Warfarin care haematologist to manage" and that "the immediate past history of "spiking" supported the cautious approach of incrementally increasing the dosages of Warfarin in an attempt to bring the plaintiff's INR above the sub-therapeutic level and into the target range."[77] In addition to that, there was evidence about the comparative risks of sub-therapeutic and supra-therapeutic INRs to the effect:

(a) Even where Warfarin is used, there is a risk of thromboembolism of between 1 and 3 in every 100 patients a year.

(b) The risk of bleeding (including central nervous system bleeding) increases significantly as the INR increases.

(c) There was a paucity of material dealing with the management of patients whose INR was very unstable.

[134] There was, though, substantial evidence which would support the conclusions reached by the learned trial judge on this point:

(a) Professor Fox (a haematologist) – it was important to involve the patient's treating cardiologist given the fluctuating INR. SNPL should have informed Dr Powell of the difficulty in controlling Ms Papa's INR.[78]

(b) Professor Metz (a haematologist) – that there were situations where it was desirable that a pathologist advise a patient's general practitioner to consult with the patient's cardiologist[79] and that it would be

---

77 At [154].

78 Ex 1 report of 24 June 2005; T 2-26, l40 – 2-27 l10; T 2-28, l35-38; T 2-40, l40-50 and l54-60.

79 T 4-49, l30-60.

logical, if a general practitioner feels unable to manage the problem, to refer the patient to the treating cardiologist.[80]

(c) Professor Metz also said that there are certainly some cardiologists who, even though they are not in control of the Warfarin treatment, may feel that Heparin is indicated and that the cardiologist is aware of matters not necessarily known to a haematologist, such as other risk factors like auricular fibrillation, dilatation of each side of the heart and so on. A cardiologist is also in a better position to assess the danger of thromboembolism.[81]

(d) Dr Garrahy (Ms Papa's treating cardiologist) – he has been involved in the treatment of patients with complex Warfarin-related problems. He has been (and would continue to be) involved with patients whose Warfarin therapy has become unstable and would not necessarily defer to a haematologist.[82]

(e) Professor Eikelboom (a haematologist) – he thought it "proper practice" to discuss the erratic INR control with the patient's general practitioner.[83] He agreed that a reasonable haematologist would have made contact with Ms Papa and informed her of the risk of thromboembolic events to which she was exposed and would have made contact with her clinicians about her condition.[84]

[135] The content of the duty of care which was held by his Honour to be applicable in the circumstances of this case is supported by the evidence set out above. While there was no unanimity on this area among the experts there was sufficient evidence to allow his Honour to arrive at the conclusion he did.

[136] The appellant also submitted that the duty of a medical practitioner (as enunciated in *Rogers v Whitaker*) is to warn a patient of a material risk inherent in the proposed treatment. But, in this case, his Honour was dealing with another area of the duty described in *Rogers v Whitaker*. He was concerned with the "duty … to exercise … skill and judgment' [in] the provision of information in an appropriate case."[85] The learned trial judge's reasoning was conditioned by the statement in that authority[86] that: "There is a fundamental difference between, on the one hand, diagnosis and treatment and, on the other hand, the provision of advice or information to a patient." The information which his Honour held should have been given to Ms Papa was with respect to her particular problem and with whom she should consult. The duty held to exist did not include a requirement for SNPL to advise on a particular treatment but to recommend that alternative forms of anti-coagulation be investigated. This is advice of a different nature to advice such as recommending a particular course of treatment.

Finding of referral to cardiologist contrary to the evidence – Ground 5

[137] The ground advanced under this heading is that the learned trial judge erred in finding that, if SNPL had given Ms Papa's general practitioner the "advice and

---

80 T 4-50, l1-10.
81 T 4-57, l1-20.
82 T 2-75, l35-50.
83 T 4-9, l45-50.
84 T 4-13, l1-45.
85 *Rogers v Whitaker*, 483.
86 At 489.

recommendations" referred to in [167] of the Reasons, then the general practitioner would have referred Ms Papa to her cardiologist.

[138] In [169] of his reasons the learned trial judge reached this conclusion:

> "The question then arises as to what is likely to have happened if the defendant had given the advice to the plaintiff and her general practitioner which I consider it should have but did not. Specific questions addressed to Dr Powell concerned his response if he had been told by the defendant that the plaintiff should consult with her cardiologist or that he should administer Clexane to the plaintiff. His response is that he would have followed the advice given by the defendant in that regard. Considering Dr Powell's evidence as a whole, however, **I also consider it more likely than not that if he had, by no later than 22 February 2002 received the advice and recommendations to which I have just referred, he would have referred the plaintiff to her cardiologist, Dr Garrahy**. …" (emphasis added)

[139] The appellant argues that this finding is flawed because:

(a) the appropriate specialist to have been consulted was a haematologist not a cardiologist;

(b) Dr Powell, when informed by Dr Rowbotham that SNPL would no longer provide Warfarin care for Ms Papa, considered referring the respondent to a haematologist because his practice was to refer patients to the appropriate specialist and that haematology was the appropriate speciality; and

(c) Dr Powell was not aware of any need to refer her to a cardiologist.

[140] There is, though, contrary evidence to that relied upon by the appellant. Dr Powell did say that if he had received a recommendation from SNPL that Ms Papa should be referred to her cardiologist then he would have referred her[87] to Dr Garrahy.[88]

[141] Further, Dr Powell said that he had not considered referring her to a cardiologist at that time because he was not aware of the need to do so.[89] It also appears to be reasonably clear that Dr Powell was not in possession of all the relevant information at the time he saw the respondent following the cessation of the Warfarin care by SNPL.

[142] This is an area in which the learned trial judge had relevant and acceptable evidence to support his finding and there is no reason for it to be disturbed.

No evidence of causation – Grounds 6 and 7

[143] This general ground is in two parts. The first is an assertion that the learned trial judge erred in finding that if the respondent had been referred to her cardiologist it was more likely than not that the cardiologist would have instituted the treatment program he described in his evidence, that is, instituting anti-coagulation therapy using Heparin. The error, it is said, arises in the light of other findings made by the learned trial judge. Those findings were that there was a known risk of haemorrhagic event in the case of supra therapeutic INR levels and the risk of an

---

87 T 3-38, 48.

88 T 3-39, 10.

89 T 3-46, 55-60.

haemorrhagic event at INR 6.5 or higher was significantly greater than the risk of a thromboembolic event at INR 1.5 or lower. Further, it is said, that Ms Papa's counsel did not ask her general practitioner, nor her cardiologist, what advice either of them would have given her as to the high risk that such an inappropriate treatment program would or might cause the respondent to suffer substantial haemorrhaging which, in turn, might cause her considerable harm or death. Further, it is said, that Mr Papa's counsel had not asked her what she would have done if she had been advised by her general practitioner or her cardiologist as to the relative risks of, on the one hand, continuing with the gradual increase of her Warfarin dosage and, on the other hand, instituting an inappropriate treatment program of the type described by her cardiologist.

[144] The second part of this general heading relies upon the argument that the learned trial judge wrongly drew an inference in favour of the respondent and against the appellant as to what they would have done when he should have:

(a) inferred that, had the respondent's counsel asked her general practitioner and her cardiologist what advice either of them would have given the respondent as to the high risk of Heparin treatment, the answers would not have been favourable to the respondent's case, because she would not have given her informed consent; and

(b) he ought properly to have inferred that, had the respondent's counsel asked the respondent what she would have done if she had been advised as to the relative risks of the two types of treatment, the answer would not have been favourable to her case; and

(c) he ought properly to have found that the respondent had failed to prove that any negligence of the appellant in failing to raise with the respondent's general practitioner the matters set out above had caused the respondent's loss.

[145] The appellant argues that neither Dr Powell nor Dr Garrahy was asked what advice either would have given to Ms Papa as to the risks of administering Heparin and the comparative risks of continuing cautiously to increase the doses of Warfarin. Further, Ms Papa was not asked whether she would have agreed to Dr Garrahy's treatment regime if he or Dr Powell had properly explained to her the risks of such a regime and the comparative risks of ongoing gradual increases in Warfarin.

[146] There was extensive evidence called from both sides concerning the use of Heparin, its use in both general terms and with a patient like Ms Papa, and the risks associated with its use both generally and for Ms Papa. Many of these matters were summarised by the learned trial judge (these are set out in [18] and [19] above). His Honour also noted the objections to the use of Heparin that were suggested to Dr Garrahy (at [114]-[115] of the reasons).

[147] Dr Garrahy's evidence in cross-examination on this matter was persuasive so far as the learned trial judge was concerned. That evidence was accepted – see [171] of the reasons.

[148] It must be acknowledged, though, that the evidence does compel a finding that the use of Heparin in the circumstances being experienced by Ms Papa was not universally accepted. It is a major part of the appellant's case that the risk of use would have had to have been conveyed to Ms Papa and that, had that been done, the unlikelihood of her accepting that treatment should have been taken into account.

[149] The appellant's argument, though, does not allow for the substantial evidence – available to be accepted – that there was not a significant risk of an adverse outcome of anticoagulation and, thus, a hemorrhagic event, if the Heparin treatment had been instituted.

[150] It must also be borne in mind that the treatment of Ms Papa was not able to be conducted by reference to any fixed formula or set of tables. The reasons for the extreme variability in her INRs were not fully understood by any of those who treated her or gave evidence. A court should be careful not to impose upon a treating physician or a hypothetical treating physician a set of conditions which do not allow for the fact that the treatment of many complaints cannot be based solely on the application of fixed principles. As Dr Garrahy observed:

> "The practice of medicine is often a balance between risk and benefit and, for example, if you have a patient who requires Heparin and you bring them into hospital, you may or may not be able to get a bed quickly for that patient. The patient might need immediate protection against some sort of threat to their person and therefore you might opt for one drug compared to the other. Bringing the patient into hospital to give them unfractionated Heparin, which is still the standard recommendation, for example, of the European society of cardiology, that might expose the patient to not only the risk of the Heparin but for also the risks of drip site sepsis. **So, the practice of medicine is a balance of risk and benefit, it's not a cook book."**[90] (emphasis added)

[151] This approach was supported by Professor Fox when, in answer to a question in cross-examination, he said:

> "I'm asking you, doctor, whether you accept that there is no protocol, guideline or published peer reviewed paper which recommends or mandates the use of low molecular weight Heparin in a patient whose INR levels on Warfarin therapy have become sub-therapeutic. There is just nothing in the world that recommends that course?-- Well, there are papers dealing with patients who are on Heparin – on Warfarin at least as to how you can change them over to low molecular weight Heparin because the Warfarin therapy has to be interrupted, and that is used for dealing with surgical procedures. What you say is correct. **However, there are circumstances in medicine that frequently arise where you don't have a little formula to follow exactly. You have to use ad lib and judgment as to how you're going to get through a set of circumstances, and that usually happens about every day**.[91] (emphasis added)

[152] On the question of whether or not the learned trial judge erred in not taking into account what the appellant suggests was necessary to take into account under this heading. His Honour did recognise that there was a risk in the proposed treatment. At [171] he said:

> "…True it is that Dr Garrahy's proposed treatment carried with it an increase (perhaps a significant increase) in the risk of the plaintiff suffering an haemorrhagic event. But that was a risk to be managed

---

90 T 2-74, 55 – T 2-75 10.

91 T 2-34, 32-51.

> by him as her treating cardiologist. His management of that risk is not a matter for present adjudication."

[153] That is, with respect, the correct approach to take. The appellant has approached this question as one which is clear cut and capable of an easy and apparent answer. That is not the case. There was significant evidence before the learned trial judge about the risks of using Heparin and the risks of an adverse outcome from anticoagulation. In cross-examination Professor Fox was asked about patients who have a greater tendency to bleed than other patients and a patient who is anticoagulated with an INR under 6. Professor Fox said that those matters do not tell him anything about the patient. He said:

> "I know what you're trying to suggest is there's a chance that this patient may be at excess risk of bleeding, but I'm not quite sure that that's exactly so."[92]

[154] Later, a scenario was put to Professor Fox about Ms Papa being given a dosage of low molecular weight Heparin by injection in the circumstances she was then experiencing and he accepted that there was a potential risk of her becoming over anti-coagulated, but he pointed out that that effect can be reversed through the use of Protamine.[93]

[155] Dr Davidson was cross-examined about Ms Papa's being in a high risk category for both thrombotic stroke and for a hemorrhagic stroke. His opinion was that her risk was mainly thrombotic and that his assessment was that in the last week of February the INR did not seem to be escalating rapidly and so it was unlikely to overshoot.[94]

[156] Dr Davidson also gave evidence, in cross-examination, of the manner in which the administration of Clexane could be managed in order to avoid risk.[95]

[157] Professor Metz, who was called by the appellant, was cross-examined about the prospects of haemorrhaging at an INR of 1.5. His evidence was that people do not normally bleed at that INR level and that the primary focus would have been on avoiding a thromboembolic event.[96]

[158] There was also evidence adduced from a number of the witnesses about their own use or their awareness of the use by others of Heparin notwithstanding the risks which might arise.[97]

[159] The main focus, though, of the appellant was with respect to the questions asked of the respondent, Dr Powell and Dr Garrahy. Neither was asked about the advice they would have given to Ms Papa. Ms Papa was not asked to consider what she would have done if the risks of another treatment plan had been explained to her. This argument was promoted in the light of the appellant's position that the procedure of administering Heparin was of immense risk rather than, as it appears from the evidence, it being a risk which was capable of being managed.

---

92 T 2-21, 1-4.
93 T 2-26, ll 1-20.
94 T 2-65, ll 30-40.
95 T 2-60, ll 50-60 – T 2-61, l 23.
96 T 4-52, ll 1-10.
97 Dr Davidson at T 2-58 and T2-60; Dr Garrahy at T 2-77, 78 and 79; Professor Metz at T 4-57; Professor Fox at T 2-7 and T 2-44; and Professor Eikelboom at T 4-8 and T 4-9.

[160] The appellant argued that the learned trial judge drew an inference in favour of Ms Papa rather than against her. This, it was said, was impermissible on the basis that the Court should not draw inferences on a relevant issue favourable to a party whose counsel refrains from asking crucial questions of the party or of a witness who could have answered them. The omission to ask such questions gives rise, it is said, to the natural inference that the party feared to do so, and that is some evidence that the question would have exposed facts unfavourable to the party calling the witness.

[161] Against that is the evidence from the respondent that if either her general practitioner or her cardiologist had recommended treatment she would have followed their recommendation.[98] This is consistent with the evidence from Dr Powell that Ms Papa was a patient who followed his treatment recommendations.[99]

[162] The application of the principles in *Jones v Dunkel*[100] to circumstances where counsel refrains from asking crucial questions of a witness who could have answered them was considered by Handley JA in *Commercial Union Assurance Company of Australia Ltd v Ferrcom Pty Ltd*[101] where his Honour said:

> "There appears to be no Australian authority which extends the principles of *Jones v Dunkel* to a case where a party fails to ask questions of a witness in chief. However I can see no reason why those principles should not apply when a party by failing to examine a witness in chief on some topic, indicates "as the most natural inference that the party fears to do so". This fear is then "some evidence" that such examination in chief "would have exposed facts unfavourable to the party": see *Jones v Dunkel* (at 320-321) per Windeyer J. Moreover in *Ex parte Harper*; *Re Rosenfield* [1964-5] NSWR 58 at 62, Asprey J, citing *Marks v Thompson* 1 NYS 2d 215 (1937) at 218, held that inferences could not be drawn in favour of a party that called a witness who could have given direct evidence when that party refrained from asking the crucial questions."

[163] This was cited with approval by the Court of Appeal in *R v Navarolli.*[102] The appellants rely on this to make the submission that, far from drawing an inference that Ms Papa would have elected to be treated with Heparin if all the risks had been explained to her, the trial judge ought to have inferred that she would not have done so.

[164] In *Kuhl v Zurich Financial Services Australia Ltd,*[103] Heydon, Crennan and Bell JJ, did not completely accept what Handley JA had said in *Commercial Union*. Their Honours said:[104]

> "Where counsel for a party has refrained from asking a witness whom that party has called particular questions on an issue, the court

---

98 T 1-45 – T 1-46.
99 T 3-37.
100 (1959) 101 CLR 298.
101 (1991) 22 NSWLR 389, 418-419.
102 [2010] 1 Qd R 27, 29.
103 (2011) 243 CLR 361.
104 At 385.

> will be less likely to draw inferences favourable to that party from other evidence in relation to that issue." (footnote omitted)

[165] In a footnote to that statement their Honours observed:

> "Handley JA stated some stronger propositions in those passages, but what he said is at least authority for what is stated above."

[166] It would appear, then, that a court, rather than not drawing inferences favourable to a party in these circumstances will be less likely to draw such inferences. Thus, it is still open to a court to draw favourable inferences but the failure referred to will be a heavy obstacle in the way of drawing such inferences.

[167] The argument advanced by the appellant, though, is one which might have been advanced if the question to be decided was whether or not Ms Papa's general practitioner or cardiologist had been negligent, had they given the advice which his Honour found they would have been more likely than not to have given. But that is not the focus of inquiry. This is not an exercise in attempting to determine what a hypothetical unidentified cardiologist might have recommended and done.

[168] The question then which is proper to ask is the question which his Honour did ask, namely, what, on the balance of probabilities, would Dr Garrahy have recommended and done. The inquiry exemplified in *Firth v Sutton*[105] of what would have been said by a "reasonably prudent solicitor" was an inquiry to be made in the light of an action against a solicitor.

[169] The chain of events which his Honour found would have occurred necessarily only requires that inquiry be made as to what an identified person would have done and he did find, on the balance of probabilities, what Dr Garrahy would have done.

[170] There is, though, the argument by the appellant that the questions asked of the respondent and her general practitioner and treating cardiologist were too general. That complaint, though, also arises out of the same misconception. The plaintiff, at trial, was not required to demonstrate what she would have done, had she been advised by a "reasonably prudent cardiologist". She had to establish what she would have done after having been advised by her own general practitioner and cardiologist and, once it was established to the relevant degree of satisfaction what they would have done, then it was not necessary to ask her more than she was asked.

Use of hindsight – Ground 9

[171] The appellant contends that the learned trial judge erred in failing to assess the evidence prospectively and used unjustified hindsight by using knowledge as to what had occurred to the respondent and the manner or means by which that outcome might have been prevented.

[172] Both Professor Fox and Professor Metz agreed that if Ms Papa had been administered Clexane between 13 and 28 February it would probably have prevented her thrombotic stroke.

---

105 [2010] NSWCA 90.

[173] The learned trial judge concluded[106] that had Dr Garrahy's proposed treatment been instituted then it was more likely than not that the risk of a thromboembolic incident would have been ameliorated and more likely than not that she would not have suffered the stroke.

[174] The exercise undertaken by the learned trial judge was not contrary to the prescription set out by Hayne J in *Vairy v Wyong Shire Council*.[107] In *Vairy*, Hayne J was speaking of the issue of whether there had been a breach of duty. To determine that one looks forward from a time before the occurrence of the injury. In this case, his Honour was considering the likely series of events after the breach of duty had occurred. This requirement was obviously in the learned trial judge's mind as he specifically refers to it in [81] of his reasons.

[175] The appellant seeks to conflate these two issues because, while it acknowledges that his Honour's conclusion concerned the question of causation, rather than liability, the appellant said it must have had an effect on his conclusion on liability. The appellant refers to [168] of his Honour's reasons but in that paragraph and in earlier paragraphs one cannot draw a conclusion that his Honour relied on hindsight to arrive at his conclusion.

[176] In any event, the evidence was not sufficient to allow a conclusion that either Dr Garrahy or Dr Powell were giving evidence based upon a view of the facts that they had formed since the events in question. Their evidence was that they would have taken certain steps. Dr Garrahy, in particular, was not challenged about his evidence on this point and the learned trial judge was able to (if he thought it necessary) rely on the evidence of other specialists (for example, Professor Metz) that the treatment Dr Garrahy said he would have undertaken was something which would have occurred to him at the time.

Conclusion

[177] The appellant has failed to demonstrate error in the reasoning or conclusions of the learned trial judge.

[178] I would dismiss the appeal with costs.

---

106 At [171] of the reasons.

107 At [105]. See [50] above.