COURT OF APPEAL FOR ONTARIO

CITATION: Johnson v. Lakeridge Health Corporation, 2024 ONCA 291
DATE: 20240419
DOCKET: COA-23-CV-0613

Rouleau, Lauwers and Monahan JJ.A.

BETWEEN

William Johnson, Jennifer Johnson and Roberta Johnson

Plaintiffs (Appellants)

and

Lakeridge Health Corporation, Dr. Morris Neale Ginsburg, Dr. Shenif Ladak, Dr. David Crisp, Dr. Rose-Anne Vieira*, Dr. Geoffrey Donsky, John Doe and Jane Doe

Defendants (Respondent*)

Paul Harte and Jan Marin, for the appellants

Darryl Cruz and Stephanie Willsey, for the respondents

Heard: March 15, 2024

On appeal from the judgment of Justice J. Di Luca of the Superior Court of Justice, dated May 1, 2023.

Monahan J.A.:

OVERVIEW

[1] In October 2012, William Johnson, who was then 43 years old, suffered two strokes. While the initial stroke, which occurred sometime before October 18, 2012, (the “First Stroke”) was less severe, the second stroke on October 30, 2012,

(the “Second Stroke”) was major and life-altering, with significant long-lasting consequences.

[2] Mr. Johnson was admitted to hospital on October 18, 2012, following the First Stroke. He remained in the hospital for approximately five days, during which time he underwent several tests that identified the underlying cause of the First Stroke as being a dissection or tear within the wall of the vertebral artery in his neck. This had caused a blood clot to form, which subsequently dislodged and blocked blood flow to his brain.

[3] Mr. Johnson was discharged by the respondent, Dr. Rose-Anne Vieira, on October 23, 2012, with a prescription for a number of medications, including 81 mg of Aspirin daily. It was agreed that the respondent had discharged Mr. Johnson without reviewing the MR angiogram of his head and neck vessels taken on October 22, 2012 (the “MRA”), and that her failure to do so was a breach of the applicable standard of care.

[4] Damages having been agreed upon, the only issue at trial was causation, specifically, whether the negligent discharge of Mr. Johnson by the respondent on October 23, 2012, had caused the Second Stroke. The parties filed a detailed agreed statement of fact (“ASF”) and there were only two witnesses at trial, Mr. Johnson’s expert, Dr. Louis Caplan, and the respondent’s expert, Dr. David Gladstone.

[5] In his detailed and comprehensive reasons for judgment, the trial judge rejected the evidence of Dr. Caplan and accepted that of Dr. Gladstone. He found that the appellants had not proven, on a balance of probabilities, that the Second Stroke would likely have been avoided had Mr. Johnson been prescribed Heparin instead of Aspirin. He therefore dismissed the appellants' action on the basis that it had not been proven that the respondent's admitted negligence caused Mr. Johnson's Second Stroke.

[6] For the reasons set out below, I would dismiss the appeal.

GROUNDS OF APPEAL

[7] The appellants raise two issues on appeal:

i. the trial judge permitted "trial by ambush" by admitting Dr. Gladstone's opinion on the likely cause of the Second Stroke when that opinion had not been disclosed in his expert reports, contrary to r. 53.03(03); and,

ii. the appellants had established a *prima facie* case on causation and the respondent failed to adduce evidence sufficient to displace that *prima facie* case.

[8] Before analysing the issues, and explaining why I would not give effect to either ground of appeal, I address the factual context, as set out in the ASF and the expert evidence, and briefly summarize the analysis and findings of the trial judge.

FACTUAL CONTEXT

A. THE ASF

[9] The ASF was a comprehensive document which provided context for the testimony of the two expert witnesses. In addition to providing background information on the parties, the ASF set out a chronology of relevant events related to Mr. Johnson, background medical evidence regarding stroke and stroke mechanisms, and identified the likely causes of Mr. Johnson's two strokes.

(1) Chronology of relevant events

[10] The ASF explained that Mr. Johnson first attended at the emergency department of a local hospital on October 17, 2012, complaining of a fainting episode. After being given IV fluids and nausea and pain medication, he was released from hospital.

[11] Mr. Johnson re-attended at the hospital on October 18, 2012. Certain diagnostic tests indicated that he had likely suffered an ischemic stroke, which occurs when there is a blockage of blood flow in part of the brain, causing damage to brain cells. He was admitted to hospital and prescribed two anticoagulant drugs, including Heparin.

[12] By October 23, 2012, Mr. Johnson had improved and was in stable condition. He was discharged by the respondent, who prescribed a number of medications including 81 mg of Aspirin daily. However, the respondent did not

review Mr. Johnson's MRA before discharging him. It was agreed that her failure to do so breached the expected standard of care.

[13] Mr. Johnson remained in stable condition from October 23, 2012, to October 30, 2012. He was mobile and able to communicate normally throughout that week. On October 29, 2012, Mr. Johnson went to see his family doctor, who reviewed the MRA that had been taken prior to his discharge. After consulting with a neurologist, the family doctor instructed Mr. Johnson to return to hospital immediately to start Heparin treatment.

[14] Mr. Johnson was readmitted to hospital on October 29, 2012, and started on an intravenous dose of Heparin. Treatment must be continued for several days for Heparin to reach the optimal dosage. He remained in stable condition and did not exhibit or report any distress throughout the remainder of that day.

[15] However, on the afternoon of October 30, 2012, Mr. Johnson suffered the Second Stroke. His clinical condition worsened significantly over the next couple of days to the point where he experienced reduced consciousness, required intubation, and underwent emergency surgery. He subsequently required months of inpatient rehabilitation while experiencing severe ongoing symptoms including nausea, episodic headaches, vertigo, left upper limb tremor, and speech and vision difficulties. He also needed a walker to ambulate.

(2) Background on stroke and stroke mechanisms

[16] The ASF explained that an ischemic stroke occurs when there is a blockage of blood flow in part of the brain, causing damage to brain cells. A common cause of strokes in young and middle-aged adults is a dissection or tear that develops within an artery wall.

[17] One way in which such a dissection can result in a stroke is through blood clots forming at the site of the dissection; these clots can then dislodge and block blood flow within the brain. Strokes may also result if the injured artery becomes severely narrowed or occluded, thereby reducing blood flow to the brain.

[18] Because strokes often arise from blood clots, patients who are at risk of stroke are typically prescribed medications to lower the risk of blood clot formation. There are two main classes of anticlotting medications in clinical practice, antiplatelet drugs and anti-coagulant drugs.

[19] Antiplatelet drugs work by inhibiting blood platelets so that they are less ‘sticky’ and less likely to form a clot. Aspirin is an anti-platelet drug.

[20] Anticoagulant drugs work by inhibiting specific coagulation factors in order to interfere with the body’s ability to produce blood clots. Heparin is an anticoagulant drug.

[21] Heparin requires monitoring with blood tests. The main advantages of antiplatelet drugs such as Aspirin are that they have a lower risk of bleeding than anticoagulants and are easier to use.

[22] As of 2012, the Canadian Stroke Best Practice Recommendations contained no specific recommendations as between Aspirin and Heparin pertaining to the treatment of artery dissections.

(3) Cause of the strokes

[23] The ASF stated that the First Stroke was most likely caused by a dissection in an artery in Mr. Johnson's neck. This resulted in the formation of an embolism or blood clot which subsequently dislodged and blocked blood flow to Mr. Johnson's brain.

[24] The ASF did not provide a definitive explanation for the cause of the Second Stroke. It stated that the Second Stroke "is best explained by his left vertebral artery dissection, which either produced further emboli [i.e. blood clots], blocking blood flow to smaller artery branches supplying the left cerebellum, and/or via hemodynamic ischemia due to reduction of blood flow within the left vertebral artery."

B. EXPERT EVIDENCE

[25] The appellants' expert, Dr. Caplan, testified that the Second Stroke was caused by blood clots that formed at the site of the artery dissection and that, if Mr.

Johnson had not been discharged on October 23, 2012, and had been prescribed Heparin, he would not have suffered the Second Stroke.

[26] Dr. Caplan agreed that the available scientific evidence and clinical guidelines do not indicate that Heparin is any more effective than Aspirin in preventing secondary strokes. He also agreed that the available medical guideline recommendations indicate that either treatment is considered reasonable in responding to artery dissections. His opinion that the Second Stroke would have been prevented by Heparin was primarily based on his experience in treating approximately 200 patients with Heparin or other anticoagulants, none of whom subsequently suffered a second stroke.

[27] The respondent's expert, Dr. Gladstone, disagreed. He concluded that, on a balance of probabilities, it was unlikely that Mr. Johnson's outcome would have been any better had he been prescribed Heparin rather than Aspirin on October 23, 2012. Dr. Gladstone primarily based his opinion on a review of Mr. Johnson's medical records and on the best available evidence from the medical literature on the treatment of artery dissections. This literature did not support the superiority of anticoagulant therapy such as Heparin over antiplatelet therapy such as Aspirin.

[28] In his initial expert report, Dr. Gladstone identified the cause of the Second Stroke in precisely the same manner as was set out in the ASF. (In fact, as noted above, the wording of the ASF reproduced Dr. Gladstone's opinion on this issue,

as expressed in his initial expert report.) Dr. Gladstone's expert report provided his interpretation of the neuroimaging studies performed at the time of Mr. Johnson's admission to hospital in October 2012. He noted that the MRA performed on October 22, 2012, "shows that the left vertebral artery is occluded in the neck beginning from just above its origin" and attached a copy of the MRA as an appendix to his report. He then offered his opinion that the Second Stroke was likely caused either by blood clots that formed at the site of the arterial dissection, and/or by reduced blood flow in the artery.

[29] In his evidence-in-chief at trial, however, he went further and opined that, based on his observation of an occlusion in Mr. Johnson's MRA, it was more likely that the Second Stroke has been caused by a reduction of blood flow in the artery rather than by blood clots. Appellants' counsel objected on the basis that this opinion had not been disclosed in Dr. Gladstone's expert reports, as required by r. 53.03(03). The trial judge allowed Dr. Gladstone to offer that opinion, ruling as follows:

> I'm going to allow the evidence to stand subject to argument on weight at the end of the trial. It's an issue that was squarely raised in Dr. Caplan's evidence. The possibility of two mechanisms for the second stroke were front and centre in Dr. Gladstone's report. He's now placed one above the other, but be that as it may, both were in play and it's an area on which if counsel sees fit, they can cross-examine and seek clarity.

[30] Dr. Gladstone was subsequently cross-examined by the appellants' counsel and "backed off" from his evidence-in-chief on this issue. He reverted to the opinion expressed in his expert report to the effect that either mechanism, the blood clot or reduced blood flow in the artery, was the likely cause of the Second Stroke.

TRIAL JUDGE'S ANALYSIS AND FINDINGS

[31] The trial judge correctly identified the test for causation as set out in *Clements v. Clements*, 2012 SCC 32, [2012] 2 S.C.R. 181, at paras. 8-9, which requires the plaintiff to show on a balance of probabilities that "but for" the defendant's negligent act, the injury would not have occurred. The defendant's negligence must have been a necessary cause, though not the only cause, of the plaintiff's injury.

[32] The trial judge found that, had the respondent reviewed the MRA on October 23, 2012, she would not have discharged Mr. Johnson from hospital and instead would have commenced anticoagulation therapy with intravenous Heparin. The "core issue", therefore, was whether it was more likely than not that treatment with Heparin commencing on October 23, 2012, would have prevented the Second Stroke.

[33] After reviewing the evidence of the two experts in considerable detail, the trial judge noted that there were a number of issues on which they were ad idem.

[34] Both experts agreed that the available scientific studies and literature demonstrated no difference in efficacy between anticoagulation and antiplatelet therapy in preventing secondary strokes. The experts also agreed that the treatment outcomes with either therapy revealed a low chance of secondary stroke, roughly 2 percent. They further agreed that, in cases of artery dissection, blood clots are the cause of 90 percent or more of the related strokes but that hemodynamic occlusion (i.e., narrowing or blockage of an artery) can also account for secondary stroke.

[35] The trial judge then provided a number of reasons why he did not accept Dr. Caplan's evidence that the use of Heparin starting on October 23, 2012, would likely have prevented the Second Stroke. He noted that Dr. Caplan's opinion was primarily based on his personal anecdotal experience in successfully treating patients using Heparin, despite the fact that this was not supported by the available scientific evidence. The trial judge further found that Dr. Caplan mischaracterized the scientific evidence by attempting to argue that this literature offered "no evidence" on the issue of the relative efficacy of anticoagulant versus antiplatelet therapy in preventing secondary strokes. Consistent with Dr. Gladstone's evidence on this issue, the trial judge found that the available scientific literature had not shown any statistically significant difference between these two forms of therapy. This was not "no evidence" on the issue but, rather, was evidence that was

inconsistent with Dr. Caplan's opinion that treatment with Heparin would likely have prevented the Second Stroke.

[36] The trial judge also pointed out that Dr. Caplan was mistaken regarding a number of the factual circumstances of the case and could not recall whether he had reviewed imaging done on Mr. Johnson following his October 18, 2012, admission to hospital. In the trial judge's view, these errors and omissions, when taken together, suggested "a lack of care and diligence in assessing the specific facts of Mr. Johnson's case."

[37] The trial judge further expressed concern over the fact that Dr. Caplan responded defensively to objectively valid questions, suggesting a lack of objectivity that is fundamental to an expert's task in helping the court. The trial judge was left with the sense that "Dr. Caplan was going to defend his opinion no matter what, rather than objectively acknowledging the state of the science and how it impacted his opinion."

[38] Having rejected Dr. Caplan's opinion on the "core issue" in the case, the trial judge proceeded to explain why he preferred and accepted Dr. Gladstone's evidence in this regard. In the trial judge's view, Dr. Gladstone's evidence overall was more cogent and objective. Dr. Gladstone testified in a forthright manner, accepting where appropriate that certain matters should have been more clearly stated in his report, and did not attempt to place "spin" on his evidence. Dr.

Gladstone's opinion that treatment with Heparin as opposed to Aspirin would not likely have made a difference in preventing the Second Stroke was well supported by the available scientific literature.

[39] The trial judge further accepted Dr. Gladstone's opinion with respect to the cause of the Second Stroke, despite the inconsistency between his evidence-in-chief and cross-examination on this issue. While the trial judge acknowledged that the unfolding of Dr. Gladstone's evidence on this issue "was not perfect", he nevertheless accepted Dr. Gladstone's ultimate opinion that Mr. Johnson had an occluded artery and that this had "played a role in causing the second stroke." In coming to this conclusion, he relied on the "obvious" evidence of an occlusion on the imaging referenced in Dr. Gladstone's expert report and described in his trial evidence. He further accepted Dr. Gladstone's evidence that the occlusion in Mr. Johnson's artery was a factor that would have made Heparin less effective in preventing the Second Stroke.

[40] The trial judge also considered the appellants' argument regarding the efficacy of the specific dosage of Aspirin taken by Mr. Johnson, which was 81 mgs daily, the standard dosage used in Canada. He accepted Dr. Gladstone's evidence that, based on the available scientific evidence, there was no reason to believe that a higher dosage of Aspirin would have led to a different outcome in Mr. Johnson's case. Nor, in any event, would concerns over the dosage of Aspirin

prescribed for Mr. Johnson somehow prove that Heparin would have been more effective in preventing his secondary stroke.

[41] Based on his review of the evidence as a whole, the trial judge was not satisfied that the Second Stroke would likely have been prevented had Mr. Johnson been placed on Heparin instead of Aspirin at the time of his initial discharge from hospital. As such, the plaintiffs had failed to prove causation and the action was dismissed.

ANALYSIS

A. There was no trial by ambush

[42] The appellants take exception to the fact that Dr. Gladstone was permitted to testify during his evidence-in-chief that an occlusion of Mr. Johnson's artery was the "likely cause" of the Second Stroke. I note again the statement in the ASF, which came from Dr. Gladstone's opinion and was accepted by the appellant as to the likely cause of the second stroke: "further emboli [i.e. blood clots], blocking blood flow to smaller artery branches supplying the left cerebellum, and/or via hemodynamic ischemia due to reduction of blood flow within the left vertebral artery." While Dr. Gladstone's expert reports had identified either blood clots and/or reduced blood flow in the artery as likely causes of the Second Stroke, his reports had not identified one mechanism as being more likely than the other. Thus, the

appellants argue, admitting this evidence was contrary to r. 53.03(03) and amounted to “trial by ambush”.

[43] I do not agree.

[44] Even assuming, without deciding, that the trial judge ought not to have permitted Dr. Gladstone in his evidence-in-chief to express the opinion that the second stroke was caused by the occlusion in Mr. Johnson’s left vertebral artery, it is noteworthy that Dr. Gladstone later backed off from that opinion on cross-examination. Dr. Gladstone thus ultimately reverted to his original stance, testifying that the Second Stroke was likely caused by blood clots and/or by reduced blood flow in his artery. In any event, Dr. Gladstone’s evidence explaining how the occlusion he observed in Mr. Johnson’s left vertebral artery contributed to the Second Stroke is merely an elaboration of his opinion, as set out in his expert reports, that reduced blood flow in the vertebral artery was a likely cause of the Second Stroke. The appellants could hardly have been surprised by this evidence since they themselves had agreed in the ASF that a reduction of blood flow in Mr. Johnson’s vertebral artery might have caused the Second Stroke.

[45] Given this context, the evidence to which the objection was made did not affect the outcome of the case. Based on his review of the evidence as a whole, the trial judge was not satisfied that the Second Stroke would likely have been prevented had Mr. Johnson been placed on Heparin instead of Aspirin at the time

of his initial discharge from hospital. The trial judge accepted Dr. Gladstone's evidence that based on the occlusion he observed in Mr. Johnson's left vertebral artery, he was at high risk for a secondary stroke no matter what treatment he received, since "even if the mechanism of the stroke was embolic, Heparin would have been too little too late, as it would not have been able to open the blockage."

[46] The appellants had the burden of proving on a balance of probabilities that Heparin would have been more effective than Aspirin in preventing the Second Stroke. The trial judge rejected Dr. Caplan's evidence and accepted that of Dr. Gladstone on that issue, as he was entitled to do. It follows that the appellants did not meet their burden of showing that the respondent's admitted negligence caused the Second Stroke.

[47] These considerations are in my view dispositive of the appellant's argument that the trial judge permitted trial by ambush in this case.

B. The appellants did not establish a *prima facie* case

[48] The appellants argued in their factum that they had established a prima facie case since the uncontested evidence was that stroke victims treated with Heparin only had a 2 percent chance of suffering a secondary stroke. The appellants argue that, in these circumstances, the burden should have shifted to the respondent to adduce evidence sufficient to displace what they described as a prima facie case of causation.

[49] The simple answer to this ground of appeal is that the appellants did not establish a prima facie case on the issue of causation.

[50] The core issue in the case was not the absolute effectiveness of either Heparin or Aspirin but, rather, whether there was a difference in their relative effectiveness in preventing Mr. Johnson's Second Stroke. While stroke victims who are treated with Heparin generally have only a 2 percent risk of developing a secondary stroke, the same is true of those treated with Aspirin. As such, the mere fact that patients treated with Heparin had a low risk for developing a secondary stroke does not amount to a prima facie case that Mr. Johnson's Second Stroke would have been prevented had he received Heparin rather than Aspirin commencing on October 23, 2012.

[51] I see no palpable or overriding error in the trial judge's analysis and thus no basis for interfering with his finding that the appellants failed to show on a balance of probabilities that treatment with Heparin would likely have prevented the Second Stroke.

[52] I would therefore not give effect to this ground of appeal.

DISPOSITION

[53] There was no legal error in the trial judge's analysis and his application of the relevant legal principles to the facts of the case was reasonable and open to him on the record. Accordingly, I would dismiss the appeal.

[54] The respondent is entitled to costs of the appeal in the agreed amount of $40,000, on an all-inclusive basis.

Released: April 19, 2024 “P.R.”

“P.J. Monahan J.A.”

“I agree. Paul Rouleau J.A.”

“I agree. P. Lauwers J.A.”