

CANADA / JUDGMENT

Ricottone v. Long

2025 BCSC 1388

COURT

Supreme Court of British Columbia

DECIDED

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2025 BCSC 1388 Ricottone v. Long

IN THE SUPREME COURT OF BRITISH COLUMBIA

Citation:

Ricottone v. Long,

2025 BCSC 1388

Date: 20250721

Docket: S205203

Registry: Vancouver

Between:

Ralf Ricottone

Plaintiff

And

Dr. Neil David Long

Defendant

Before: The Honourable Justice Ahmad

Reasons for Judgment

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Place and Dates of Trial:

Vancouver, B.C.

November 25-27 and 29, 2024

December 2, 3, 5, 6, 9, 2024

Place and Date of Judgment:

Vancouver, B.C.

July 21, 2025

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I. Introduction

- [1] In the period from August 1 to August 8, 2018, the plaintiff, Ralf Ricottone, attended at the emergency department three times complaining of a headache and other symptoms.
- [2] On August 1, he attended at the emergency department of Vancouver General Hospital (VGH) where he was seen and assessed by Dr. Noah Alexander and Dr. Patrick Oxciano. A CT scan of his head did not reveal any acute abnormality. He was provisionally diagnosed with, and treated for, a headache, and discharged with instructions to follow up with his family physician.
- [3] On August 4, Mr. Ricottone attended Burnaby General Hospital (BGH), also complaining of a headache, where he was assessed and treated by the emergency room physician, Dr. Neil Long. Mr. Ricottone was diagnosed with a migraine and discharged.

- [4] Finally, Mr. Ricottone attended at BGH on August 8, also with a complaint of headache. There, a CT scan revealed that he had experienced a subarachnoid hemorrhage (SAH), or a bleed in his brain. He underwent surgery the next day and was discharged on August 23, 2018.
- [5] In this action, Mr. Ricottone alleges that Dr. Long failed to meet the standard of care required of him by failing to adequately consider and investigate a possible SAH on August 4. Mr. Ricottone says that, but for that failure, he would not have suffered the significant SAH that he did on August 8. Mr. Ricottone claims for non-pecuniary damages he alleges he sustained as a result.
- [6] Although Mr. Ricottone initially brought this action against two of the other physicians involved in his care, he did not proceed with those claims. This action proceeded against Dr. Long alone.

II. Issues and Summary of Conclusions

- [7] That Dr. Long owed a duty of care to Mr. Ricottone is not in dispute: *ter Neuzen v. Korn*, [1995] 3 SCR 674 at para. 33 [*ter Neuzen*]. The issues to be decided are:
- Did Dr. Long breach the standard of care expected of a reasonable emergency physician in the same circumstances?
 - If Dr. Long breached the standard of care, did that breach cause Mr. Ricottone's alleged injuries?
 - If Dr. Long breached the standard of care and caused Mr. Ricottone's alleged injuries, what is an appropriate award of non-pecuniary damages?
- [8] For the reasons that follow, I find that Dr. Long did not breach the standard of care imposed on him. Accordingly, the action against him is dismissed.
- [9] However, for completeness, I have also having considered the alternative issues of causation and damages. I have concluded that, even if there was breach, that breach did not cause the injuries alleged. Those injuries would have resulted in a damages award of \$25,000.

III. Facts and Evidence

a. Background

- [10] I have considered all of the evidence, including the oral evidence of the parties and the documentary evidence before me. However, in these reasons, I do not purport to canvass the details of all of the evidence that was advanced, except as they specifically relate to an issue in dispute. A summary of the key points of the evidence, drawn in part from Dr. Long's written summary of the facts, is set out below.

August 1, 2018

- [11] On August 1, 2018, Mr. Ricottone attended at VGH complaining of a headache. He was accompanied by his wife and his brother-in-law, who drove because of Mr. Ricottone's headache.
- [12] The emergency registration factsheet records his complaint as "Headache, moderate pain, gradual onset[t]". Once admitted, Mr. Ricottone was assessed by a nurse who recorded that Mr. Ricottone complained of a two-day headache with nausea and vomiting, which by then had stopped, and dizziness. No other physical issues or neurological deficits were recorded.
- [13] Two doctors assessed Mr. Ricottone that evening: Dr. Alexander, and Dr. Oxciano, who took over at the end of Dr. Alexander's shift.
- [14] Dr. Alexander reviewed the medical records, took Mr. Ricottone's history, and conducted an examination. He recorded that Mr. Ricottone complained of a two-day bitemporal headache, had vomited twice, and had sensitivities to light and noise, but had no trauma, was not coughing up blood, and had no other relevant physical symptoms or neurological deficits. Although Dr. Alexander did not record that Mr. Ricottone's headache was a gradual onset, he testified that he confirmed that history with Mr. Ricottone.
- [15] Dr. Alexander testified that he considered, but ruled out, the possibility of a SAH (including a sentinel bleed) based on Mr. Ricottone's history and physical examination. His preliminary diagnosis was that Mr. Ricottone had a migraine.
- [16] Dr. Alexander ordered medications for Mr. Ricottone's headache, which seemed to improve it. A nurse recorded after the medication was administered: "feels better, minimal headache". This improvement indicated to Dr. Alexander that he was "on the right track" with his preliminary diagnosis.
- [17] Dr. Alexander did not order a CT scan or lumbar puncture, nor did he consult or refer Mr. Ricottone to a specialist such as a neurosurgeon.
- [18] After Dr. Alexander's shift ended, Mr. Ricottone's care was handed over to Dr. Oxciano. Dr. Oxciano also reviewed the medical records, after which he re-took Mr. Ricottone's history and conducted an examination. Based on this assessment, Dr. Oxciano determined that a diagnosis of SAH was "very unlikely".
- [19] Dr. Oxciano ordered Dilaudid, an opioid used to treat moderate to severe pain, for Mr. Ricottone's headache pain. However, given that Mr. Ricottone had postural vertigo, he also ordered a CT scan of Mr. Ricottone's head. He was worried Mr. Ricottone might have had a fall, causing a subdural or epidural hematoma. The history provided for the CT scan was "two day history of persistent headaches and dizziness. ? Fall. Rule out bleed".
- [20] The impression from the CT scan was "no acute intracranial abnormality".

[21] Based on the information he had, Dr. Oxciano diagnosed Mr. Ricottone with a headache "NYD" or "not yet determined" and discharged Mr. Ricottone with advice to take Tylenol 3 for his pain and follow up with his family physician.

August 4-5, 2018

[22] At 10:42 p.m. on August 4, 2018, Mr. Ricottone went to the emergency room at BGH with a headache. Again, he was accompanied by his wife and brother-in-law, who drove.

[23] On his arrival, the nursing staff nurse took Mr. Ricottone's history, conducted an examination, and recorded their initial findings on a "Triage Assessment Form".

[24] That form recorded:

- a) That the nurse had chosen "Headache, Severe" from the dropdown menu of "stated complaints" and "Headache, Sev Pain/Sud? Worst" from the dropdown menu of "chief complaints". It was acknowledged that "Sud?" means "query sudden onset";
- b) That Mr. Ricottone "looks well";
- c) The history of chief complaints: "migraines for 5 days with nausea and vomiting", "light-headedness", "pain bilateral to temples", and "photophobia";
- d) That Mr. Ricottone had attended VGH three days prior where he had monitoring and a CT scan; and
- e) The results of the nurses' examination, including that he had normal grip, speech, and cognition.

[25] Dr. Long used the Triage Assessment Form to guide his initial assessment of Mr. Ricottone. However, he agreed that the onus was on him to determine whether the patient's headache was, in fact, sudden onset or severe. Having reviewed the form, he said he maintained a wide range of possible diagnoses, including SAH and sentinel bleed.

[26] Dr. Long assessed Mr. Ricottone at 11:20 p.m., at which time he took a history and conducted an examination. Mrs. Ricottone was present with Mr. Ricottone for both.

[27] Dr. Long was aware that it was Mr. Ricottone's second attendance at a hospital with headache complaints. He testified that, for that reason, he spent additional time taking his history from Mr. Ricottone and his wife to obtain as much information as possible. In particular, he wanted to understand if Mr. Ricottone's headache was ever sudden onset.

[28] Dr. Long made the following notes of that interview on the form titled Emergency/Ambulatory Care Clinical Record:

PC [presenting complaint] - Headache and HTN [hypertension / high blood pressure]

HPC [history of presenting complaint] - Headaches since Tuesday

Lightheaded on standing

Constant headache, gradual onset, in temples & behind eyes.

VGH on Wednesday + CT head NAD [nil acute found]

Feels lightheaded on standing

- [29] Dr. Long's notation of "constant" headache was based on his understanding that the headache had been ongoing, with no changes, since its onset the previous Tuesday.
- [30] Dr. Long testified that his notation that the headache was "gradual onset" was significant, as the presence of a sudden onset headache would require that he consider the possibility of a sentinel bleed/SAH. He testified that, given that significance, whether a headache is gradual or sudden is one question he asks "absolutely" of all headache patients.
- [31] Dr. Long acknowledged that Mr. Ricottone did not use the words "gradual onset", but had responded "yes" when asked if it was gradual onset. Dr. Long testified that he recorded the words "gradual onset" only after he asked a series of follow-up questions. As set out in more detail below, Dr. Long did not record any of the questions or the responses that led him to the conclusion.
- [32] With some limited exceptions, the Ricottones have very little recall of that discussion with Dr. Long.
- [33] After taking Mr. Ricottone's history, Dr. Long conducted an examination in which he assessed Mr. Ricottone's speech, vision, hearing, swallowing, neck (pain and stiffness), and strength (to assess for neurological issues) and his balance and movement. Both were normal. He also found no signs of trauma or a reduced Glasgow Coma Score (i.e., Mr. Ricottone was fully alert and showed no signs of confusion).
- [34] Dr. Long also reviewed Mr. Ricottone's CT scan report and lab results from his attendance at VGH on August 1. He learned that nothing acute was found and no bleeds were found.
- [35] After taking Mr. Ricottone's history and conducting the examination, Dr. Long's differential diagnoses included migraine, tension, headache, bounce back headache, temporal arthritis, and glaucoma. He said that while he considered the diagnosis of a SAH (and sentinel bleed), he ruled it out based on Mr. Ricottone's history, physical examination, and the investigations. Most significant to Dr. Long's determination, was the fact that Mr. Ricottone did not have a sudden onset headache, nor did he have any neurological deficits, a reduced level of consciousness, intractable vomiting, or other signs indicative of a SAH.

- [36] Dr. Long determined it was reasonable to treat Mr. Ricottone for a migraine and see if he improved with this treatment. He ordered a "migraine cocktail" for Mr. Ricottone, which was administered at 11:58 p.m. Dr. Long subsequently re-assessed him. Mr. Ricottone's headache had improved with the migraine cocktail but had not fully resolved. Dr. Long then offered a sphenopalatine nerve block, another treatment for a migraine.
- [37] The nerve block, administered by a Q-tip like instrument inserted in the nose, was an aspect of the August 4 visit that both Mr. and Mrs. Ricottone clearly recalled.
- [38] After that treatment, at 1:05 a.m. on August 5, 2018, the nurse recorded: "states headache remains but 'better now'".
- [39] Before discharging Mr. Ricottone, Dr. Long reviewed a form that had been completed by the nursing staff at 11:50 pm--the Emergency Nursing Assessment Record--to ensure he had not missed anything in Mr. Ricottone's history or presentation. This form recorded that Mr. Ricottone's chief complaint was "severe headache x 5 days" and that he had rated his headache a "7/10 generalized". At trial, Mr. Ricottone agreed that the headache was 7/10. That rating indicated to Dr. Long that Mr. Ricottone was providing an honest answer about his pain and that his headache was moderate. Most patients Dr. Long sees describe their pain as an 11/10.
- [40] Given the record that the headache had been "severe" for five days, Dr. Long testified that he spent another five minutes with Mr. Ricottone to find out more about the headache.
- [41] Around 1:50 a.m., Dr. Long re-assessed Mr. Ricottone, he said for a third time. Mr. Ricottone advised Dr. Long that his symptoms had improved. Dr. Long recalls that Mr. Ricottone's headache was then about a 1/10. The nursing note from 1:50 a.m. states: "pt reassess by Dr. Long, script given with instructions by Dr. Long. Pt states sx [symptoms] improved. IV SL [saline lock] removed intact".
- [42] Dr. Long discharged him with advice to return to BGH if his headache returned and to avoid codeine and opiates. He did not order a further CT scan or a lumbar puncture, nor did he refer Mr. Ricottone to a neurosurgeon.
- [43] Mr. Ricottone walked himself out of the emergency department. Mrs. Ricottone recalled that Mr. Ricottone's headache had eased off by the time he was discharged.

August 8-9, 2018

- [44] Mr. Ricottone's wife testified that on August 8, 2018, she was in the living room with Mr. Ricottone when he went to the bathroom and said he was going to be sick. He had intractable vomiting. He began slurring his words and then went limp. Mrs. Ricottone and Susan Tocco, Mrs. Ricottone's sister, recalled that Mr. Ricottone's presentation was different on August 8, 2018, than the week prior. He was confused and did not know who Ms. Tocco or her husband were.

- [45] Mr. Ricottone was taken to BGH by ambulance at 1:35 a.m.
- [46] At 1:42 a.m., a triage nurse assessed Mr. Ricottone. On triage, the nurse noted, among other things, "Some confusion noted by EHS on arrival. For example, asking wife what was happening". He was noted to look unwell.
- [47] At 0225, Mr. Ricottone was assessed by a nurse. The nurse recorded Mr. Ricottone's chief complaint as "headache/vomiting". The nurse documented "headache x 5 days, nausea + vomiting. Seen for same at VGH & here. Given Maxeran to take home & discharged. Today sudden onset of headache".
- [48] Around 2:35 a.m., Dr. Rowell-Wong took Mr. Ricottone's history and conducted a physical examination. As a result, he ordered a CT scan, followed by a CT-angiogram. Mr. Ricottone was diagnosed with a SAH.
- [49] He was transferred to Royal Columbian Hospital ("RCH") around:8:00 a.m. on August 9, 2018, where he was assessed by Dr. Navraj Heran, who ultimately performed the surgery that was required to treat the SAH.
- [50] The Patient Notification Sheet used for the transfer states: "5/7 HA, vomit, nausea; CT reg @ VGH. Today smoking à Sudden HA, confusion à BM à Presyncope; EHS à BGH à GCS 14 (SAH)". The last entry was indicative of a decreased level of consciousness.
- [51] Dr. Heran assessed Mr. Ricottone at 10:05 a.m. He noted:
- "This 54-year-old male presented with a sudden severe headache yesterday. He has had the headache for a week actually. He has had 2 visits to emergency prior. This morning's visit prompted CT scan being performed This gentleman presents with ruptured aneurysm. He warrants Endosaccular (sic) coiling of this aneurysm. Microsurgical clipping i[s] an option too but not preferred.
- [52] At trial, Dr. Heran confirmed that his understanding on August 8, 2018, when he assessed Mr. Ricottone, was that he had had a sudden severe headache that day.
- [53] The anesthesiologist's pre-anesthetic consultation states: "He presented after a week-long history of a dull headache, and now presented today with the Royal Columbia Hospital with an onset severe headache".
- [54] Dr. Heran performed the endovascular coiling procedure on August 9, 2018.

Post August 8, 2018 events

- [55] Dr. Long called the Ricottones on two occasions after August 8, a practice he said was part of his training in medicine and done out of a genuine care for his patients. The first call occurred at some point during Mr. Ricottone's admission to RCH. Dr. Long said that he called to say he was sorry Mr. Ricottone had an SAH, and to glean more information about what had happened and the nature of the headache. He said that Mrs. Ricottone confirmed Mr. Ricottone did not have a sudden onset headache.
- [56] Mrs. Ricottone agrees that she received a call from Dr. Long, however, she does not recall that he asked about the nature of the headache. She recalls that Dr. Long apologized and said that he did not realize "it was that bad". Dr. Long denies using words to that effect.
- [57] After a short time, Mrs. Ricottone handed the telephone to Susan Tocco, Mrs. Ricottone's sister, who was with her at the hospital. Ms. Tocco testified that Dr. Long said he was "really sorry about what had happened" and asked if he could keep in touch with them. She agreed.
- [58] A couple of weeks later, Dr. Long called back and spoke with Mr. Ricottone. Again, he said he was sorry Mr. Ricottone had had an SAH and inquired about the onset of his headache. He explained to Mr. Ricottone the importance of this question. Mr. Ricottone confirmed that he had never had a sudden onset headache before August 8, 2018. Dr. Long said he would raise Mr. Ricottone's case with his department and get back to him if there was something he should have done differently. He had no further communication with Mr. Ricottone after that call.
- b. Medical evidence
- [59] Three emergency physicians gave expert opinion evidence regarding the standard of care: Dr. Indraneel Ghosh, on behalf of Mr. Ricottone; and Dr. Travis Cadieu and Dr. Andrew Digney, on behalf of Dr. Long. In addition, Dr. Donald Cameron and Dr. Christopher Honey, both neurologists, gave evidence on behalf of Dr. Long.
- [60] Drs. Alexander, Oxciano, and Heran also gave evidence at trial, as did Dr. Patrick Zaidel, who treated Mr. Ricottone for management of his post-August 2018 medical issues.
- [61] Despite differing areas of expertise and opinions, some of the evidence regarding SAHs and their symptoms is not in dispute.
- [62] First, a SAH is a bleed in the brain. A small bleed, referred to as a "sentinel bleed", may be a warning that a more significant second bleed is coming. However, a sentinel bleed is a SAH, albeit a relatively small one.
- [63] Second, the classic presentation of a SAH is a severe and sudden headache reaching maximum intensity in a period of seconds to minutes, or possibly up to an hour:
- a) Dr. Digney refers to the headache as one that "reaches maximal intensity in seconds to minutes";

- b) Dr. Cadieu refers to a "headache of abrupt or sudden onset". He testified that a "thunderclap" headache is defined by the time to peak intensity, which would be less than five minutes, but usually in "seconds or immediately";
- c) Dr. Ghosh explains that both sentinel bleeds and SAHs are usually characterized by "sudden onset headaches including the classic 'thunderclap headache' that instantaneously peaks at headache onset, as well as headaches that reach maximal severity within seconds to one hour of onset"; and
- d) Dr. Honey notes that the International Classification of Headache Disorders describes the headache as typically "severe and sudden in onset, peaking in seconds (thunderclap headache) or minutes".

[64] Third, the experts also generally agree about the intensity of a headache associated with a SAH:

- a) Dr. Cadieu explained that the typical description used by a patient is the "worst headache of my life";
- b) Dr. Digney agrees, noting in his report that "The onset of a sub-arachnoid bleed is often taught as a 'thunderclap onset of the worst headache of the patient's life'". At trial, Dr. Digney explained that a thunderclap headache is like being hit in the back of the head with a baseball bat or being struck by lightning. He describes this type of headache to patients by using the words "bang" or "clap" to illustrate the point;
- c) Dr. Cameron testified that there was "no comparison" between a migraine headache and a headache from a SAH, the latter of which he said is described by patients as a 15/10;
- d) In his report, Dr. Honey noted that a SAH headache is classically described as "sudden", "explosive" or "the worst headache of my life". At trial, he explained that a SAH headache is a 10/10 or 11/10 headache. He said that a patient will describe this type of headache as "blistering" or unlike any other headache they have had before; and
- e) Dr. Alexander described the headache as "getting hit with a thunderbolt in the brain" and as "severe and debilitating".

[65] Fourth, a sudden onset or thunderclap headache must prompt an investigation for a SAH. The accepted standard is to perform a CT scan of the brain within 6 hours of the initial symptom onset. If the CT scan is performed after 6 hours of onset, a lumbar puncture or a CT angiography may be performed.

[66] Fifth, if a SAH, in the form of a sentinel bleed or a larger bleed, is identified, it can be treated surgically.

IV. Discussion and Analysis

A. Standard of Care

1. Legal Framework

[67] The well-established standard of care required of a physician was set out in *ter Neuzen*:

[33] It is well settled that physicians have a duty to conduct their practice in accordance with the conduct of a prudent and diligent doctor in the same circumstances. In the case of a specialist, such as a gynaecologist and obstetrician, the doctor's behaviour must be assessed in light of the conduct of other ordinary specialists, who possess a reasonable level of knowledge, competence and skill expected of professionals in Canada, in that field. A specialist, such as the respondent, who holds himself out as possessing a special degree of skill and knowledge, must exercise the degree of skill of an average specialist in his field: (citations omitted).

[68] The standard of care is based on the standard of an ordinary, average specialist in the same field; it is not one of perfection or even of excellence: *ter Neuzen* at paras. 33-38; *Carlsen v. Southerland*, 2006 BCCA 214 at paras. 13, 15; *Gilmore v. Love*, 2023 BCSC 1380 at para. 234. If the physician establishes that he or she followed a generally accepted or standard practice of his or her peers, then that will normally result in a finding of no negligence: *ter Neuzen* at para. 38.

[69] The Court must exercise caution to avoid holding a physician "to a standard of perfection by using a poor outcome or a low risk of injury to infer negligence," as can occur "where a poor outcome is used as the starting point and working backward": *Siever v. Interior Health Authority*, 2021 BCSC 880 at para. 102. As this Court recently put in *Pellerin v. Balfour*, 2024 BCSC 2135 at para. 212,

"[c]ourts must be cognizant of the dangers of hindsight analysis in determining and assessing the standard of care".

[70] In *Pellerin*, the Court summarized the standard of care of an emergency room physician as follows:

[214] Where the defendant is an emergency room physician, further considerations may apply. As this Court noted in *Pinch*, "[t]he emergency room creates a distinctive contextual setting". In that context, at paras. 155-156, the Court in *Pinch* set out the following principles:

- a) "an emergency medicine specialist is expected to exercise a great deal of skill in history taking, examination, and instant diagnosis";
- b) an "emergency room physician must apply differential diagnosis to determine whether the presenting complaint is a major problem or some other issue", and should accordingly "give priority to the diagnosis with the most severe outcome, a 'worst is first' approach";
- c) "[a] process of diagnosis that focuses on the most likely explanation is inconsistent with a proper differential diagnosis";

- d) "if a specific risk is foreseeable, the applicable standard of care is commensurate with the potential danger"; and
- e) "[i]f a potentially life-threatening condition is included in the differential diagnosis, it is urgent to either confirm it or to rule it out".

[71] In assessing a claim for a physician's negligence, the fact that something has gone wrong is very often not in itself any evidence of negligence: *Dudas v. Munro*, [1997] CarswellBC 851, 1997 CanLII 4313 (BCSC) at para. 6, citing *Challand v. Bell*, [1959] CarswellAlta 8, 1959 CanLII 288 (ABKB) at 153.

2. Analysis

- (i) Would a reasonable emergency physician have concluded that Mr. Ricottone did not present with a sudden onset headache?

[72] Mr. Ricottone alleges that Dr. Long breached the standard of care required of him by, generally speaking, failing to adequately consider and identify the possibility of a SAH and the resulting failure to request further testing in the form of a follow-up CT scan or a lumbar puncture.

[73] There is no dispute that the classic presentation of a SAH--whether a sentinel bleed or a larger, more significant bleed--is what the experts referred to as a "sudden onset headache" or a "thunderclap" headache. Accordingly, there is also no disagreement that a patient presenting with such a headache should be assessed for a SAH, by way of CT scan or lumbar puncture.

[74] Dr. Long does not disagree. Ultimately, his conclusion that Mr. Ricottone did not present with a sudden onset headache was a primary basis on which he discounted the possibility that Mr. Ricottone had a sentinel bleed/SAH.

[75] The first question to be determined is whether a reasonable emergency physician in the same circumstances would have come to that same conclusion.

[76] In providing their opinions for Dr. Long, Drs. Cadieu, Digney, Cameron, and Honey were asked to assume, as fact, that Mr. Ricottone had reported a gradual onset headache on each of his August 1 and August 4 hospital visits.

[77] By contrast, Dr. Ghosh, for Mr. Ricottone, appears to base his opinion on the assumption that Mr. Ricottone presented with a "thunderclap" headache. He opines:

From a practice perspective, the vast majority of patients will be correctly diagnosed if all patients with thunderclap headache undergo head CT (and lumbar puncture if the CT is done after six hours from headache onset). Only an extremely small minority whose thunderclap headache is from a symptomatic but unruptured aneurysm would be missed by this approach.

[Emphasis added]

- [78] Given their assumptions, none of the experts directly addressed the issue of whether Dr. Long's conclusion that Mr. Ricottone presented with a gradual onset headache was reasonable in the circumstances. Given the significance of that assessment, as the first step of this analysis, I must consider whether it was.
- [79] In that regard, notwithstanding the August 1 record (which recorded "Headache, moderate pain, gradual onset[t]") and the August 4 record (which recorded "Headache, Severe" and "Headache, Sev Pain/Sud? Worst"), Dr. Long acknowledged that it was his role to determine whether Mr. Ricottone's headache was, in fact, sudden onset and severe. He said he did so by his two interviews--totalling approximately 20 minutes--in which he took Mr. Ricottone's history and tried to obtain as much information as he could about Mr. Ricottone's headache. Based on those interviews, Dr. Long concluded that Mr. Ricottone suffered from a "gradual onset" (i.e., not sudden onset) headache, as he noted in the hospital record.
- [80] Mr. Ricottone suggests that Dr. Long did not do enough to reach that conclusion. He notes, and Dr. Long concedes, that the words "gradual onset" were Dr. Long's words, not words that either Mr. Ricottone or his wife used. Despite the undisputed significance of that conclusion, Dr. Long did not record the questions he asked to ascertain the nature of the headache, nor did he record Mr. Ricottone's or his wife's responses to those questions. In addition, Dr. Long's entry also fails to record other information including, for example, the intensity of the headache, the presence of nausea and vomiting, or whether Mr. Ricottone had a history of severe headaches prior to his visit to the hospital on August 1. Dr. Long agreed that all such information would be relevant to his assessment.
- [81] Given the lack of information contained in Dr. Long's notes, Mr. Ricottone questions the credibility and reliability of Dr. Long's evidence regarding his efforts to ascertain whether the onset of his headache was sudden or gradual. In short, Mr. Ricottone suggests that an inference can be drawn that, despite his notation, Dr. Long had no discussion, or any thorough discussion, with Mr. Ricottone to come to that conclusion.
- [82] I am not satisfied that any such inference can be made.
- [83] It is well established that a physician's lack of proper medical records may give rise to an adverse inference and undermine the credibility and reliability of the physician's testimony at trial. As the Court noted in *Sozonchuk v. Polych*, 2011 ONSC 842 at para. 91, *aff'd* 2013 ONCA 253:
- [A]ccurate and timely record keeping in patient care and particularly in a hospital critical care ward is extremely important. The absence of contemporary recordings of important events in the care of a patient gives rise to the inference that the events simply never happened.
- [84] More recently, this Court came to a similar conclusion in *Gilmore*:

- [60] In this case, there are significant gaps in the charting of events and assessments that the various medical practitioners say they ordinarily would have undertaken, but that are not documented. While this does not automatically lead to an inference that the undocumented steps and assessments were not performed, that inference is possible after a careful weighing of all the evidence, including direct evidence, accepted evidence of standard practice, and any explanation provided for the failure to chart.
- [85] In this case, Dr. Long's notation of "gradual onset" leaves no doubt that he turned his mind to the issue of the nature of the onset of Mr. Ricottone's headache. I accept that he did. The question is whether he took adequate, or any, steps to come to that conclusion.
- [86] In *Gilmore*, the Court discusses the use of evidence of standard practice for that purpose: at paras. 61-64. Citing the decisions in *Wiebe v. Fraser Health Authority*, 2018 BCSC 1710 at para. 118, and *Parhar v. Weaver*, 2021 BCSC 123 at para. 84, the Court stated:
- [63] Even where there is medical charting evidence, but those charts contain no documentation of a particular act, "evidence of standard practice is admissible as evidence of what happened" This court has also stated that: "the absence of a chart note will not deprive a health practitioner of the ability to rely on his or her standard practice on a matter" (citations omitted).
- [87] The Court ultimately concluded:
- [65] The weight I give to the standard practice evidence of the various medical practitioners in this case depends on the substance of the evidence itself, including the extent to which it is persuasive evidence that something was likely done because it is consistently done by that practitioner in the same or similar circumstances.
- [88] In this case, Dr. Long gave evidence of his standard practice in taking a patient's history, both generally and for patients presenting with headaches. He testified that, in all cases, he tries to let the patient and family talk before asking follow-up questions. He said the one question he "absolutely" asks of all headache patients is whether the headache was sudden onset. He does so by asking whether, at any point, the headache was sudden like an "explosion" or a "kick or baseball bat" to the back of the head. He elaborated on cross-examination, saying he would ask: "At any point was this [headache] sudden onset, was this a thunderclap, like 'bang', 'smack' in the back of the head?", and would click his fingers to illustrate the point. He said he would then ask: how bad did the headache get, based on a number out of 10, how bad was the headache when it started, and how long did it take to get from the lowest to the highest number. Dr. Long testified that this information would provide him with a timeframe of the onset. He acknowledged that while many of his colleagues consider "sudden onset" to mean 30 to 60 seconds, he considers a headache that takes less than an hour to reach maximal intensity to be sudden onset. Dr. Long said he always "[runs] this question to the ground".

- [89] When asked on cross-examination if he had that detailed conversation with Mr. Ricottone, Dr. Long replied, "absolutely". He was of the view that Mr. Ricottone and his wife understood the questions that he asked.
- [90] Mr. Ricottone argues that at the time of Dr. Long's assessment, he had only been working as an emergency room physician for approximately nine months, only two of which were in Canada. Since then, he has had a further six years of experience working in the emergency room and appears to have researched the topic of sentinel bleeds/SAHs. Mr. Ricottone submits that those factors suggest that Dr. Long's evidence regarding his standard practice, and the discussion he had with Mr. Ricottone, may well be influenced by what he now knows, and does not reflect his practice at the time.
- [91] I do not accept that submission.
- [92] First, while Dr. Long's experience in a Canadian emergency room was limited, it is not accurate to suggest that he was a recently qualified doctor or that his experience in an emergency room was limited. In fact, he was qualified as a doctor in 2007, some 11 years prior to his encounter with Mr. Ricottone, and had experience in emergency medicine in New Zealand as early as 2009, followed by positions as an emergency room registrar in New Zealand and Australia from 2010 to 2017, and as an emergency doctor in Australia from July 2017 to January 2018. In addition, he testified that his experience diagnosing and treating SAHs, including sentinel bleeds, was not limited to his work in emergency, but also included his work in intensive care.
- [93] I am satisfied that, prior to August 4, 2018, Dr. Long had sufficient experience, including in the emergency room setting, to have established the standard practice about which he testified.
- [94] Moreover, Dr. Long testified that, even prior to gaining that experience, he was well aware of the significance of a sudden onset headache, noting that its importance was stressed in medical school and in the medical literature. I accept that evidence. I also accept that, given this awareness and experience, he had established the practice he described and which he unequivocally confirmed he followed with Mr. Ricottone and his wife.
- [95] To accept Mr. Ricottone's position that the discussions regarding the nature of the headache's onset did not occur, either as Dr. Long described or at all, means rejecting his evidence as not credible or unreliable. Having assessed Dr. Long's evidence, bearing in mind the well-established principles set out in *Faryna v. Chorny*, [1952] 2 DLR 354, 1951 CanLII 252 (BC CA) at 357, and in *Bradshaw v. Stenner*, 2010 BCSC 1398 at para. 186, aff'd 2012 BCCA 296, I do not find either to be the case.
- [96] Generally speaking, Dr. Long was a thoughtful and considered witness, as reflected in the calm and reflective manner in which he gave his evidence. That evidence was consistent between direct and cross-examinations.

- [97] While he remained steadfastly adamant that he asked Mr. Ricottone the same questions he asked of all headache patients, he conceded points on cross-examination where appropriate. For example, he easily conceded that he could not recall the exact words that Mr. Ricottone used in response to his inquiries and that, despite his notation, Mr. Ricottone himself did not use the words "gradual onset".
- [98] Dr. Long's recall was not limited to generalities, but included some detail including, for example, that Mr. Ricottone mentioned he previously had headaches when roofing in the summers and that his August 2018 headache came on in the daytime. Dr. Long's ability to recall those details, although not extensive, makes his recall something more than just a bare assertion that he would have asked the standard questions he said he did.
- [99] I accept, as Mr. Ricottone argues, that at times, Dr. Long's responses were lengthy, somewhat academic, and appeared to be based on research he had conducted after August 2018. However, it did not appear that his subsequent research or his evidence were intended to assist his position in the litigation, but, rather, to assist the Court in understanding the issue before it. Nor can I conclude that his research tainted his evidence regarding the steps he took and the conclusions he made on August 4, 2018. Having reviewed his evidence, I am satisfied that he was able to, and did, distinguish between the information he obtained after August 2018 and the actual events of August 4, 2018, without blurring the two.
- [100] In my view, both Dr. Long's subsequent research, and his subsequent telephone calls to the Ricottes, demonstrate a sincere and genuine interest in his patients' (including Mr. Ricottone's) well-being and improving his knowledge as a physician. His follow-up reflects a methodical approach to patient care that is consistent with his evidence of the standard practice he described.
- [101] I do not accept that either the research or telephone calls were a self-serving attempt to justify his actions (or inactions) in respect of Mr. Ricottone's care. Furthermore, the call does not constitute an admission of liability and must not be taken into account on this determination of liability: Apology Act, SBC 2006, c. 19, s. 2.
- [102] As I have said, as best reflected by his notation of "gradual onset", it is clear that Dr. Long was alive to the significance of the nature of the headache's onset. With that knowledge, I find it implausible that he would make that notation without having fully canvassed the issue with Mr. and Mrs. Ricottone, as Dr. Long testified he did.
- [103] I am satisfied that Dr. Long's evidence, including the evidence regarding his standard practice both generally and in respect of Mr. Ricottone, is credible and reliable.
- [104] There is no dispute that Mr. Ricottone and Mrs. Ricottone were also credible witnesses. I accept that both did their best to recall the events relating to the action, including their attendances at the hospitals on August 1, 4, and 8, 2018. Both readily admitted when they could not recall events and both conceded some points that did not assist Mr. Ricottone's position. Their admissions and concessions are to their credit.

- [105] However, credibility and reliability are distinct concepts. Credibility concerns the veracity of a witness; reliability involves the accuracy of the witness's testimony. Accuracy engages consideration of the ability of the witness to observe, recall and recount what occurred: *R. v. Khan*, 2015 BCCA 320 at para. 44.
- [106] In this case, Mrs. Ricottone appeared to be quite nervous (understandably so), which affected her ability to recall even basic information, such as how long she had been married and where one of her sons lived. While she was able to recall some aspects of the August 4 hospital attendance (for example, that Mr. Ricottone's blood pressure was high and the administration of the sphenopalatine nerve block), she had very little to no recall of any other significant aspects of that visit. For example, she did not recall that, in addition to the nerve block, Mr. Ricottone was also treated with medication, nor was she able to recall if any of the treatment improved Mr. Ricottone's headache (as was recorded in the nurses' notes). Most significantly, as she readily conceded on cross-examination, Mrs. Ricottone could not recall if Dr. Long asked her and Mr. Ricottone any questions or what their responses may have been.
- [107] Mr. Ricottone's recall was limited to the administration of the nerve block and his wife asking about his blood pressure. He provided no evidence of any discussion he may have had with Dr. Long.
- [108] Given their lack of recall, neither Mr. Ricottone nor Mrs. Ricottone were able to deny, clarify, or confirm Dr. Long's version of the discussions he said he had to determine the nature of Mr. Ricottone's headache. With no such evidence, and given my assessment of Dr. Long's credibility and reliability, there is no basis on which to discount Dr. Long's testimony regarding those discussions.
- [109] I am satisfied that Dr. Long took adequate steps to determine whether Mr. Ricottone's headache was sudden onset, that determination being important to a possible diagnosis of SAH. Having taken those steps, he concluded it was not. I cannot conclude that he did not meet the standard of care required of him by any failure to do so, as Mr. Ricottone has alleged.
- [110] However, that finding does not end the analysis. Mr. Ricottone argues that, regardless of the presence of a sudden onset headache, other factors were present that should have prompted Dr. Long to order a CT scan or lumbar puncture to eliminate any possibility of a SAH. I now turn to that argument.
- (ii) Regardless of the absence of a sudden onset headache, should other factors have nonetheless prompted Dr. Long to conduct further investigation?

[111] Dr. Ghosh opines:

Dr. Long had a duty of care to be hypervigilant of a patient returning to the Emergency Department with worsening signs and symptoms of the same complaint he was seen for a few days prior. In addition, he should also have demonstrated more attention to the fact that Mr.

Ricottone did not have a prior history of headaches, migraine or otherwise, which would render a first onset of migraine at this age very rare. These two points should have prompted Dr. Long to consider a subarachnoid hemorrhage or another sinister diagnoses and investigate this patient further, including imaging and possibly a lumbar puncture. It is my opinion that Dr. Long fell below the standard of care for a reasonable Emergency Physician in his assessment and management of Mr. Ricottone given all the above facts outlined above.

[Emphasis added]

[112] It may be that either of the two factors identified by Dr. Ghosh should have triggered heightened awareness of the possibility of a SAH. However, the evidence does not support that either assumed factor was present in this case.

[113] First, despite Mr. Ricottone's return to emergency on August 4, the evidence does not support the assumption that his headache or other symptoms were "worsening". It is true that Mr. Ricottone's headache was described in the August 4 records as "severe" and as a "migraine", as opposed to "moderate" as recorded in the August 1 record. However, with no specific evidence, it is difficult, if not impossible, to know the basis on which each of the different nurses who recorded that information decided on those descriptors.

[114] More telling is that the August 4 record indicates that the "severe" headache/"migraine" had been present for five days, a period that preceded his hospital attendance on August 1. It is also telling that on August 4, Mr. Ricottone rated his headache a 7/10, the same rating he gave his headache on August 1. Both of these facts indicate that the headache had not changed.

[115] That conclusion is consistent with Dr. Long's conclusion that the headache was "constant", which he recorded as the result of his interview of Mr. and Mrs. Ricottone. As set out above, I am satisfied that he had that discussion for the express purpose of getting more information about the nature of the headache.

[116] Finally, on cross-examination, even Dr. Ghosh conceded that the symptoms were "very similar" on both dates.

[117] There is no evidentiary foundation for the first assumption on which Dr. Ghosh's opinion is based.

[118] Nor does the evidence support his second assumption that "Mr. Ricottone did not have a prior history of headaches, migraine or otherwise". To the contrary, both Mr. and Mrs. Ricottone confirmed that he had.

- [119] Mrs. Ricottone testified that Mr. Ricottone started getting headaches in the two years prior to the SAH. (She was able to pinpoint the commencement date by reference to a visit from his sister.) Although he did not say when, Mr. Ricottone also confirmed that he had a history of headaches which would often resolve with pain medication and rest. Finally, Dr. Long learned in his interview that Mr. Ricottone previously had headaches when roofing in the summer.
- [120] As neither assumption underpinning Dr. Ghosh's opinion has been proven, I am unable to accept his opinion that Dr. Long breached the standard of care in the ways Dr. Ghosh suggests.
- [121] Nor do I accept that the use of the words "severe" and "worst" to describe Mr. Ricottone's headaches in the August 4 record are sufficient to conclude there was a breach. Dr. Long was aware of those descriptors when he took Mr. Ricottone's history. In fact, his second interview was prompted by his review of the notation that the headache had been "severe" for five days. His interview was conducted, not only to determine if the headache was sudden onset, but also to determine the severity. For the same reasons set out above, I am satisfied that Dr. Long did so.
- [122] In fact, the evidence discloses that the severity of Mr. Ricottone's headache did not warrant further investigation to rule out a SAH.
- [123] Mr. Ricottone's own 7/10 rating on August 1 and August 4 is less than the 10/10 or the 11/10 that Drs. Honey and Long would expect from their SAH patients, and significantly less than the 15/10 that Dr. Cameron testified that his SAH patients describe. Based on his experience, Dr. Cameron explained that he would consider a 7/10 headache "moderate". While subjective, it is hard to reconcile Mr. Ricottone's 7/10 rating with the intensity of a SAH-headache, as described by the experts.
- [124] In fact, Mrs. Ricottone recalls telling the admissions person on August 4 only that the headache was "bad", "persistent" and "not going away". She described Mr. Ricottone as "not feeling very good at all with his headache". In my view, that is a far cry from "debilitating", "blistering", or other such adjectives used by the experts to describe a SAH-related headache. While the intensity of Mr. Ricottone's headache was sufficient to warrant his attendance in emergency, nothing in Mrs. Ricottone's or Mr. Ricottone's evidence is consistent with a SAH-related headache.
- [125] Given Mrs. Ricottone's evidence, and Mr. Ricottone's 7/10 rating, I cannot conclude that the reference to "severe" or "worst" in the records is indicative of a SAH.
- [126] Mr. Ricottone has not proven the existence of any factors that should have prompted Dr. Long to conduct further investigation.
- (iii) Regardless of the nature of his headache and other symptoms, should Dr. Long have ordered further testing to rule out a SAH?

[127] Generally speaking, the experts appear to agree that in the absence of a sudden onset (thunderclap) headache or other "worrisome features", there is no basis on which to order a CT scan or lumbar puncture.

[128] Even Dr. Ghosh does not suggest that a CT scan or lumbar puncture should be performed on all headache patients. Rather, he links the diagnostic benefit of a CT scan or lumbar puncture to "patients with thunderclap headache". As Dr. Digney notes:

" Mr. Ricottone did NOT present with a thunderclap headache so the knee jerk response to CT and then LP would not be appropriate nor necessarily a standard of care."

[129] Dr. Cadieu expressly disagrees with the implication that any patient with a first presentation of a headache should have SAH ruled out with CT imaging or a lumbar puncture. He opines, "[i]f the history and physical examination do not yield any worrisome features, then CT imaging may not be warranted, as was in this case".

[130] Dr. Digney agrees:

The other characteristics that have been shown to have a high degree of association with a SAH and are part of the rule are symptoms of neck pain or stiffness, witnessed loss of consciousness, onset during exertion, thunderclap headache and limited flexion of the neck were never present or reported at either of Mr. Ricottone presentations to the emergency department on Aug 1st or 4th...One does not need to perform [a lumbar puncture] on every over 40-year-old that presents with a severe headache to an [emergency department]. For these patients an emergency physician must gather information and decide on the likely diagnosis as Dr. Alexander, Oxciano and Long did."

[131] As Dr. Digney opines:

In Mr. Ricottone's case the clinical picture was not classic of subarachnoid or even a sentential bleed and therefore a prudent emergency room physician must make the difficult judgment call to perform this procedure with its known complications. Again, given the history, exam and investigations performed August 1st and 4th I believe the physicians involved made a reasonable judgment call not to perform a lumbar puncture.

[132] At trial, Drs. Ghosh and Heran agreed that a lumbar puncture is an invasive procedure that carries risk and should only be performed if indicated.

[133] In this case, I have found that: (a) having taken appropriate steps to determine if Mr. Ricottone's headache was sudden onset, Dr. Long concluded that it was not; and (b) Mr. Ricottone did not present with other "worrisome features" or either of the factors that Dr. Ghosh suggests would call out for further investigation. That being the case, I am satisfied that the standard of care did not require Dr. Long to order further testing in the form of a CT scan or lumbar puncture on August 4, 2018.

3. Conclusion on standard of care

[134] As an emergency room physician, to meet the standard of care, Dr. Long was required to take a "worst is first" approach: Pellerin at para. 214. In this case, the worst or most ominous possible outcome on August 4 was a SAH, the classic presentation of which is a sudden onset headache.

[135] Regarding "worst is first", Dr. Ghosh notes:

One of the hallmark standards of care principle in the practice of Emergency Medicine is not necessarily to land on the correct diagnoses, but in fact to consider the ominous and dangerous diagnoses. An emergency physician is expected to think about and consider diagnoses that could potentially expose the patient to life/limb threatening complications, long term/permanent disabilities etc.

[136] I am satisfied that Dr. Long did just that: having identified and considered the possibility of a SAH, he reviewed the medical records, he examined Mr. Ricottone, and he took the history from Mr. Ricottone and his wife to determine if Mr. Ricottone had the "sudden onset" headache indicative of a SAH. He concluded he did not, and, accordingly, determined that Mr. Ricottone did not have a SAH. Having taken the steps he did, and having considered the relevant information, Dr. Long exercised his clinical judgment to forego a second CT scan or lumbar puncture, as he was entitled to do: *Medina v. Wong*, 2018 BCSC 292 at paras. 100-101. There is no evidence to suggest that, in the circumstances, that was not the appropriate decision.

[137] Dr. Long's assessment and treatment did not end there. He went on to treat Mr. Ricottone for a migraine, which resulted in the improvement in his headache symptoms.

[138] Other than Dr. Ghosh (whose opinion I have rejected), Dr. Cadieu was the only expert to provide evidence regarding the standard of care required of Dr. Long. Having reviewed the steps he took, Dr. Cadieu concludes that Dr. Long's assessment and treatment of Mr. Ricottone was "appropriate and not unusual for any adult patient presenting with acute headache in the emergency department". As Dr. Cadieu explains in more detail:

In my opinion, Dr Long met the required standard of care expected of him with regards to the care provided to Mr Ricottone on August 4, 2018 at Burnaby General Hospital. Dr Long determined that the headache onset was gradual (Long Q39). He documented a thorough history and physical examination for Mr Ricottone. The treatment regimen that he used for Mr Ricottone was appropriate and not unusual for any adult patient presenting with acute headache in the emergency department. There was clear documentation by the nursing staff that his headache improved following the prescribed treatment. He appropriately charted discharge instructions which included instructions to return to the emergency department if the headache is ongoing. Overall, from examination of the medical records and discovery documents, it appears that Dr Long determined that the nature of Mr. Rica tonne's headache was not worse than before, nor was it sudden nor severe in nature. Furthermore, given that CT imaging was recently performed at Vancouver General Hospital and it was normal, it is reasonable in this instance to provide treatment of the symptoms. If the symptoms are significantly improved following treatment, it is

reasonable to discharge the patient provided appropriate discharge instructions are provided. The discharge instructions provided by Dr Long were appropriate.

[139] There being no accepted evidence to the contrary, I find that Dr. Long met the standard of care required of him.

[140] If I am wrong in that conclusion, I turn now to the issue of causation.

B. Causation

1. Legal Framework

[141] There is no dispute that the governing legal test for causation is the one established in, among others, *Clements v. Clements*, 2012 SCC 32 at paras. 9-12; *Snell v. Farrell*, [1990] 2 SCR 311 at 330; and *Athey v. Leonati*, [1996] 3 SCR 458 at paras. 16-17. Simply put, a plaintiff has the burden to prove, on a balance of probabilities, that "but for" the negligence of the defendant, the injury would not have happened. Causation does not need to be proven with scientific precision. Rather, courts should take a "robust and pragmatic" approach to the facts, and may draw inferences of causation on the basis of "common sense": *Benhaim v. St-Germain*, 2016 SCC 48 at para. 54, citing *Snell* at 330-31; *Clements* at paras. 10 and 38; and *Ediger v. Johnston*, 2013 SCC 18 at para. 36.

[142] To succeed in proving causation, a plaintiff does not need to show that the defendant's conduct was the sole cause of the injury, just a necessary cause: *Athey* at para. 17; *Clements* at para. 8. So long as the defendant's act is a cause of the plaintiff's damage, the defendant is fully liable for that damage: *Blackwater v. Plint*, 2005 SCC 58 at para. 78.

[143] In *Armstrong v. Royal Victoria Hospital*, 2019 ONCA 963, rev'd on other grounds 2021 SCC 1, the Court considered causation in the context of an allegation of medical malpractice, stating at para. 61 that "the causation issue depends upon identifying the breach, since the material question is whether 'the defendant's particular substandard act or omission caused the harm'".

[144] As the Court notes in *Sacks v. Ross*, 2017 ONCA 773 at paras. 46-48 and 100, the determination of causation is more complicated for allegations of omission, as opposed to an allegation of a wrongful act:

[46] Things are more complicated where the complaint is not about something the defendant did, but about something the defendant failed to do in breach of the standard of care. When what is in issue is not the defendant's act, but an omission, the trier of fact is required to attend to the fact situation as it existed in reality the moment before the defendant's breach of the standard of care, and then to imagine that the defendant took the action the standard of care obliged her to take, in order to determine whether her doing so would have prevented or reduced the injury. Even though this exercise is bounded significantly by the actual facts, it counts as "factual" because the task is to consider how the events would actually have unfolded had the defendant taken the action she was obliged to take.

[145] Notwithstanding that complication, however, the analytical framework for determining causation is the same: (a) to determine what likely happened in actuality; (b) to consider what would likely have happened had the defendant not breached the standard of care; and (c) if applicable, to allocate fault among the negligent defendants: Sacks at para. 47.

2. Analysis

[146] In this case, Mr. Ricottone had alleged that Dr. Long breached the standard of care required of him by, generally speaking, failing to adequately consider and identify the possibility of a SAH and the resulting failure to request further testing in the form of a follow-up CT scan or a lumbar puncture. Mr. Ricottone argues that had Dr. Long identified a possible sentinel bleed on August 4, it would have led to surgical intervention which, in turn, would have prevented the more significant re-bleed on August 8.

[147] If I had found that Dr. Long had breached the standard of care (and I do not), the question is whether those failures caused the loss and damage alleged to have been incurred.

[148] As there is only one defendant in this case, for the purpose of that analysis, only the first two steps of the Sacks framework are required. I will consider each of those in turn.

a. What likely happened in actuality?

[149] Based on his conclusion that Mr. Ricottone's headache was caused by a migraine, Dr. Long did not order a second CT scan or a lumbar puncture. Without that diagnostic testing, it cannot be said with certainty what caused the headache that resulted in Mr. Ricottone's attendance at the hospital on August 4. However, the experts have identified two possible causes: a SAH, in the form of a sentinel bleed (leading up to the more significant SAH on August 8) or a migraine (as Dr. Long diagnosed). Neither party suggested any other possibility. As the first step in the Sacks framework, I must consider which of those possibilities "likely happened in actuality".

[150] Mr. Ricottone argues that the only logical conclusion is that he suffered a sentinel bleed on August 4. In support of that conclusion, he refers to the undisputed evidence that: (a) a sentinel bleed can cause severe headache pain which comes on suddenly; and (b) a sentinel bleed can be a precursor to a more significant rebleed, such as the one that occurred on August 8. Given that connection, as he argues:

What we have here is a choice between [Mr. Ricottone] having suffered severe migraines for the first time in his life just days before a serious and unrelated brain bleed, or having suffered a severe headache from a sentinel bleed which is known to precede a serious brain bleed.

[151] In effect, working backwards, he says, given the undisputed SAH on August 8, the clear inference is that the August 4 report of headache was due to a sentinel bleed.

- [152] At first blush, there is a certain appeal to the simple elegance of that argument. However, as enticing as it may be to draw that inference, it is inconsistent with the facts as disclosed in the evidence. In my view, the evidence more readily supports the proposition that Mr. Ricottone presented with a migraine (or some other form of "severe" headache), and not a SAH, on August 4.
- [153] As the medical experts agree, the classic presentation of a SAH is a severe and sudden headache reaching maximum intensity in a period of seconds to minutes. Even discounting Dr. Long's evidence regarding his discussions with the Mr. and Mrs. Ricottone, there is no direct evidence that Mr. Ricottone's headache was of sudden onset or met the level of severity of a SAH-related headache.
- [154] First, nothing in the medical records, either on August 1 or August 4, refers to "sudden onset". To the contrary, the August 1 record expressly notes that the headache was "gradual onset". While the August 4 record notes that inquiries should be made regarding the possibility of a sudden onset headache, the absence of any notation that it was suggests that neither Mr. nor Mrs. Ricottone expressly reported it as such.
- [155] By contrast, the medical records on August 8 expressly refer to the manner of onset as "sudden". On that date, the triage nurse noted that Mr. Ricottone had previously attended at VGH and BGH and recorded: "Today sudden onset of headache". Other medical professionals on August 8 recorded the same history: the hospital transfer document recorded: "Sudden HA, confusion"; Dr. Heran, the neurologist who performed the surgery, recorded: "This 54-year-old male presented with a sudden severe headache yesterday"; and Dr. Lau, the anesthesiologist, noted, "He presented after a week-long history of a dull headache, and now presented today with the Royal Columbia Hospital with an onset severe headache" [All emphases added].
- [156] The numerous express references to the presentation of a "sudden" headache on August 8 is a stark contrast to the absence of any such reference on August 4, and lends credibility to the argument that there was no report of a "sudden" headache on August 4.
- [157] There was no evidence at trial to refute that suggestion. In fact, at trial, Mr. Ricottone rejected the August 1 notation that his headache was "moderate" (saying that it was more than moderate). He also rejected the August 4 notation that the headache had lasted for two days (saying that it was longer than two days and up to two weeks). However, at no time did he challenge or reject the notation that the headache was "gradual onset".
- [158] Similarly, although she was not directly asked, at trial, Mrs. Ricottone did not suggest that the headache came on suddenly. She did confirm that she provided the information about the headache and acknowledged the importance of providing accurate information. However, she could not recall whether she told the VGH nursing staff that the headache was gradual onset.

- [159] For those reasons, even discounting Dr. Long's assessment, the evidence does not support the conclusion that the headache was sudden onset.
- [160] In addition, as I set out above, I cannot conclude that the severity of the headache was indicative of the type of SAH-related headache described by the experts.
- [161] Together, the absence of any reference in the medical records to "sudden onset", and my findings regarding the severity of the headache, is compelling evidence that the August 4 headache was not caused by a SAH.
- [162] Moreover, as Dr. Cameron explained, only about 10% patients who complain of the "worst headache of their life" actually have a SAH. The chance that Mr. Ricottone had a SAH on August 4, 2018 is slim.
- [163] On the other hand, factors are present that support the conclusion that Mr. Ricottone's headache was the result of a migraine.
- [164] To start, Dr. Honey was unable to opine that the headaches were "diagnostic of migraine", the primary issue being a lack of evidence that Mr. Ricottone had five previous attacks of migraines and, as he conceded on cross-examination, there was a question regarding the "pulsating" nature of the headache. However, Dr. Honey testified that given the strict nature of the test for a diagnosis, a patient could have a migraine without a formal diagnosis. In this case, Dr. Honey did not waiver in his view that Mr. Ricottone's headaches were "compatible" with a migraine, despite not being able to diagnose it as such.
- [165] Dr. Cameron opines that the pattern of headache presentation and symptoms on August 1 did fulfill the criteria for a diagnosis of migraine and, moreover, that Mr. Ricottone "presented with very similar symptoms associated with headache " on August 4. It stands to reason that, in Dr. Cameron's opinion, Mr. Ricottone fulfilled the diagnosis of migraine on August 4 as well.
- [166] As there is no evidence that Mr. Ricottone had five previous migraines, I accept that Mr. Ricottone did not meet the strict test for a formal diagnosis of migraine. However, given the evidence of Drs. Honey and Cameron, and with no evidence to the contrary, I am satisfied that Mr. Ricottone's headache was, at least, compatible with a migraine.
- [167] While not definitive, the fact that Mr. Ricottone responded to headache treatment both on August 1 and August 4 is also consistent with a migraine. The fact that he responded to medication on August 1 was a factor in Dr. Alexander's determination that he was on the right track with his preliminary diagnosis of a migraine. Based on the assessments and investigations conducted, Dr. Oxciano also diagnosed Mr. Ricottone with a headache "NYD" or "not yet determined".
- [168] Finally, while I accept that it is uncommon for a person to suffer a migraine for the first time after the age of 50, as Dr. Cameron explained, based on Mr. Ricottone's presentation, it is statistically much more likely he had a migraine than a SAH on August 4.

[169] Ultimately, most compelling is the finding that Mr. Ricottone did not present with a sudden onset headache with the intensity consistent with a SAH. That being the case, I find that it is unlikely that his August 4 headache was caused by a SAH/sentinel bleed; it was more likely caused by a migraine.

b. What would have happened had Dr. Long not breached the standard of care?

[170] Having concluded that Mr. Ricottone had a migraine on August 4, 2018, it follows that a CT scan or lumbar puncture would not have revealed a bleed on August 4. No surgery would have been performed.

[171] Accordingly, even if Dr. Long did not meet the standard of care required of him, I find that any such breach did not cause the loss and damage as alleged. The action can be dismissed on that basis as well.

[172] As the final alternative, if I am wrong regarding that conclusion, I will address the issue of damages.

C. Damages

1. Facts and evidence

Pre-SAH background

[173] At the time of trial, Mr. Ricottone was 60 years old. He was 54 years old in August 2018.

[174] Shortly after moving to British Columbia from Ontario in 2002, Mr. Ricottone started working for his brother-in-law as a roofer. He has been working as a roofer since.

[175] Despite his affable, albeit colourful, demeanor, by his own admission, Mr. Ricottone is "not a people person". However, he did describe himself as "happy-go-lucky". That was particularly true with his extended family, including his wife, sister, sister-in-law, and his brother-in-law, with whom he was quite close and who was the basis of his social life. Regrettably, Mr. Ricottone's brother-in-law, whom Mr. Ricottone described as "more like [his] brother" and best friend, passed away in December 2023. Mr. Ricottone said that he does not socialize anymore.

[176] Mrs. Ricottone and Ms. Tocco were more generous, describing him historically as a happy and helpful man.

[177] Aside from socializing with his family, prior to the SAH in August 2018, Mr. Ricottone's hobbies included watching television and researching conspiracy theories online.

[178] Prior to the SAH, Mr. Ricottone suffered from anxiety, as he had for most of his adult life. However, despite smoking close to a pack of cigarettes a day, he had no other health issues. Mrs. Ricottone said that he did not get frustrated and was easy to get along with. She did not observe him to have any memory issues; Mr. Ricottone said he did not. As evidence of his memory, Mr. Ricottone said that he used to sing to his wife every day and had no problems remembering all of the words.

Post-SAH health

[179] For a couple of weeks after the surgery, Mr. Ricottone did not recognize his sister-in-law or brother-in-law. Even after he was able to recognize them, he did not remember other people outside of his family.

[180] After Mr. Ricottone was discharged from RCH on August 23, 2018, he spent a couple of weeks resting and recovering at home. He was confined to a wheelchair for part of that time. He has little recollection of this time.

[181] On September 11, 2018, Mr. Ricottone had a follow-up appointment with Dr. Heran. Dr. Heran recorded the following:

He is doing really well. He still had a bit of diplopia, 6th nerve palsy on the right side, partial. He is seeing an ophthalmologist for follow up. The main reason for follow up is to make sure there are no recurrences in the long term. It is actually very uncommon for recurrence, it is about 5% of cases. I will see him in follow up once the MRI scan MR angiogram is done. He can get back to his usual routines now."

[182] Because of Mr. Ricottone's diplopia and 6th nerve palsy (both vision conditions), for the first three to four months after the SAH, he was unable to drive, and Ms. Tocco had to drive him to his appointments. Mr. Ricottone's vision issues have since been resolved, and he has returned to driving himself to appointments and elsewhere.

[183] The medical records after September 2018 reveal:

- a) In October 2018, normal cognition and balance;
- b) On March 4, 2019, "Mood disorder stable or improved. No headaches now. BP labile. Vision normal and binocular"; and
- c) On November 10, 2020, Mr. Ricottone reported "no headache or neuro complaints" and that "Recent CT angio of brain circulation good: aneurysm quiet and repaired with coils, unchanged from previous. Stable post-cerebral aneurysm, repair, asymptomatic now."

[184] Mr. Ricottone's aneurysm did not recur.

[185] Mr. Ricottone has two main ongoing complaints: short-term memory issues (he has no long-term memory issues) and associated frustration and mood issue and cardiovascular issues.

- [186] Regarding the latter, Mr. Ricottone has seen Dr. Zaidel since November 2018 for management of his hypertension. From 2019, Dr. Zaidel encouraged Mr. Ricottone to quit smoking as he was at high risk of future major acute cardiovascular events in association with his hypertension and chronic active smoking. Unfortunately, in October 2022, Mr. Ricottone suffered a myocardial infarction, i.e. a heart attack, and had five stents inserted.
- [187] Mr. Ricottone's heart attack prompted him to quit smoking. He explained that his heart attack has decreased his physical capabilities. He finally "feels his age". Despite Mr. Ricottone's heart attack, he continues to work as a roofer.
- [188] Mr. Ricottone attributes the short-term memory issues, including his difficulty finding words, to the SAH. He says that as a result of those issues, he feels what I take to mean intellectually challenged (although he used different words) which, in turn, causes him to be embarrassed, frustrated, and easily angered.
- [189] Mrs. Ricottone confirmed Mr. Ricottone's short-term memory has been affected since the SAH. She testified that he forgets things very easily. As she put it, "you can tell him something and he will not remember the next minute". She and Ms. Tocco agreed that he gets frustrated and "snaps" easily.
- [190] Mr. Ricottone had briefly sought treatment for the memory issues and received therapy. He did not continue with that treatment, preferring to play memory games on his phone. He has not sought any treatment for his mood issues.
- [191] Although Mr. Ricottone's memory issue was not the primary purpose for his visits to Dr. Zaidel, several of his records note that Mr. Ricottone had "no significant cognitive, or functional deficits". On cross-examination, Dr. Zaidel confirmed that he did not observe any memory issues, nor did he observe Mr. Ricottone having any problems finding words. He said Mr. Ricottone was fluent in their conversations. However, Dr. Zaidel acknowledged that he did not know Mr. Ricottone prior to the SAH and, as such, it could be that he was not able to detect any changes in that regard.
- [192] However, Dr. Zaidel confirmed that Mr. Ricottone consistently complained of those issues, that is, feeling intellectually challenged and that he had difficulty finding words.
- [193] Mr. Ricottone and his wife still see Ms. Tocco frequently, although Mr. Ricottone now prefers to stay home and visit with them as opposed to going out. Mr. Ricottone is able to do all of the hobbies he enjoyed before the SAH. While he has no limitations around the house, by his own concession, what he does is minimal.

Expert medical evidence

[194] As noted, on August 9, 2018, Dr. Heran performed the endovascular coiling procedure on Mr. Ricottone. By written report dated August 21, 2024, Dr. Heran provided his opinion regarding the probable effects of a delayed diagnosis and treatment and the probable impact on Mr. Ricottone. He writes:

Had Mr. Ricottone had the aneurysm treated after the initial presentation, with the history that he was describing, treatment definitely would have been recommended to him and again certainly around the time of the second admission August 4, 2018. At these times the extent of the bleeding likely would have been nominal as it did not show on the first CT scan, likely because this was done two to three days later, and any small amount of blood was not recognizable given blood breakdown, but was probably present. Therefore, the potential for complications arising from the treatment as well as any of the nominal amount of blood that was already present, the risk for vasospasm secondarily, and from hydrocephalus would have been vastly lower. It is really the risk of the procedural treatment that would be the greatest risk and it is quite clear that Mr. Ricottone did not incur any complications arising from that in itself. Therefore the rebleed that prompted the admission and transfer and definitive treatment on August 8 2018 reflects the overall worsened clinical course that has arisen as opposed to if treatment had been provided prior to then.

[Emphasis added]

[195] He adds:

Mr. Ricottone clearly has sustained brain damage as a consequence of the SAH and probably further augmented substantially and more critically from the presentation on August 8, 2018

[196] In direct examination, Dr. Heran confirmed that had a SAH been identified on August 4, surgical repair could have been done then, which would have prevented the more significant re-bleed on August 8. However, he confirmed that the surgery only stopped it from bleeding again or continuing to bleed; it did not alleviate the bleeding that had already occurred, or the damage that would have already been done to the brain.

2. Discussion and Analysis

[197] Mr. Ricottone does not allege that he missed any work or incurred any other pecuniary damages as a result of the SAH or Dr. Long's failure to meet the standard of care required of him. Mr. Ricottone's claim for damages is limited to non-pecuniary damages.

[198] As outlined in *Stapley v. Hejslet*, 2006 BCCA 34 at paras. 45-46, leave to appeal ref'd [2006] SCCA No. 100, in assessing non-pecuniary damages, courts must consider the effect of the injuries on the plaintiff's particular circumstances, using factors such as the plaintiff's age, the nature of the injury, the severity and duration of the plaintiff's pain, the extent of any disability, the impact on family and social relationships, any impairment of the plaintiff's mental and physical abilities, and the impact on the plaintiff's lifestyle. As the Court notes

in Stapley:

[45] the amount of an award for non-pecuniary damage should not depend alone upon the seriousness of the injury but upon its ability to ameliorate the condition of the victim considering his or her particular situation. It therefore will not follow that in considering what part of the maximum should be awarded the gravity of the injury alone will be determinative. An appreciation of the individual's loss is the key and the "need for solace will not necessarily correlate with the seriousness of the injury"...

[Emphasis omitted]

[199] In this case, I accept that after the August 9, 2018 surgery, Mr. Ricottone suffered from some short-term, although not insignificant, issues, including the inability to recognize his brother-in-law and sister-in-law, being confined to the house for a couple of weeks, and vision issues which affected his autonomy for up to four months.

[200] Fortunately, those issues were relatively short-term. After approximately four months, the only remaining complaint that he attributes to the SAH is with respect to his short-term memory. While not directly addressed by the experts, the defendant does not dispute that those issues are attributable to the SAH. He does dispute the extent to which the memory issue continues to affect Mr. Ricottone.

[201] Given Dr. Zaidel's evidence, I accept that the short-term memory issues are not objectively significant, or even perhaps, medically relevant. However, the objective measure of Mr. Ricottone's loss is not how his damages are to be measured; rather, I must assess the effect of the loss on the individual. To repeat the Court in Stapley, "[a]n appreciation of the individual's loss is the key and the 'need for solace will not necessarily correlate with the seriousness of the injury'".

[202] In this case, I accept that the impairment to his short-term memory is significant to Mr. Ricottone. In particularly touching evidence, he testified about no longer being able to sing to his wife--an activity that brought him joy--because he can no longer remember the words to songs. He is embarrassed and frustrated by what he perceives to be an intellectual impediment. He has become easily angered, and finds himself snapping at things easily, including getting angry at his wife and sister-in-law for no good reason.

[203] In my view, with no suggestion that the memory issue (however small) is not attributable to the SAH, it is compensable.

[204] For the most part, the cases referred to by both counsel to guide the assessment of non-pecuniary damages involve plaintiffs who have suffered symptoms similar to those suffered by Mr. Ricottone, including most significantly from shorter-term physical deficit and memory issues. Mr. Ricottone refers to the decisions *Leon v. Tu*, 2012 BCSC 1600, and *Main v. Gernon*, 2024 BCSC 373, in which the Court awarded non-pecuniary damages of \$250,000 and \$200,000, respectively (both adjusted to 2024 dollars). In my view, the effect of the injuries in those cases have more serious outcomes than is the case for Mr. Ricottone.

- [205] In Leon, also a medical malpractice case, the plaintiff suffered a brain injury which resulted in problems with organization, planning, concentration and memory, stunted emotions, and a personality change. However, as the plaintiff was only 17 years old, the effect of those problems was more impactful than the effects of the SAH for Mr. Ricottone.
- [206] In Main, not only did the plaintiff suffer more effects of a mild traumatic brain injury ongoing at trial, he also suffered from neck pain, all of which persisted to the date of trial. While he was able to continue with some of his former recreational activities, it was in a "restricted fashion" and the Court found that he had "seriously altered his lifestyle" as a result of his injuries.
- [207] Dr. Long relies on the decisions Pacheco v. Degife, 2014 BCSC 1570, Moore v. Briggs, 2011 BCSC 599, and Provencher v. St. Paul's Hospital, 2015 BCSC 916, in which the Court awarded non-pecuniary damages of approximately \$38,000, \$53,000, and \$44,000, respectively (all adjusted to 2024 dollars). In my view, while not identical, these cases align more closely with the case at bar. Of the three cases, Pacheco and Moore are most instructive.
- [208] In Pacheco, the plaintiff suffered a mild traumatic brain injury after being struck in the head with a baseball bat. After the incident, he was taken to the hospital where he remained for a week. On his release, he largely stayed home for a few months as a result of his symptoms, which included dizziness and memory loss, and was subsequently provided with exercises to assist with his memory issues. The plaintiff was left with minimal cognitive impairment with the exception of a mild deficit in visual attention and memory which did not limit him in his daily activities. The plaintiff's activities were modified slightly after the incident. Again, the Court awarded approximately \$38,000 (adjusted to 2024 dollars) in non-pecuniary damages.
- [209] In Moore, the Court described the plaintiff's injuries sustained as the result of an assault as follows:
- [4] The plaintiff remained in hospital for two weeks following the assault. Initially, he could not walk or eat. He had severe pain in his head and neck. He could not talk properly....
- [5] Following release from hospital, the plaintiff stayed with his mother who took two weeks off work as a care aid to look after her son....The plaintiff suffered headaches, numbness in his neck, and vomiting. He required assistance with walking and personal care. After these two weeks, he was able to maintain food but could not walk without assistance for another month. He had dizziness when he looked downwards.

...

- [11] As a result of the assault, the plaintiff continues to have some problem with memory. This has improved over time such that it does not interfere with work or enjoyment of life, but still lingers. He also has difficulty with attention span and focus. He continues to have almost daily headaches. These often interrupt his sleep. He noticed that eye near the indentation in his temple was "lazy", a couple of times a week at first and now hardly noticeable.
- [12] For about four years after the assault, the plaintiff had problems with balance such that he could not walk a straight line and was dizzy when he looked down.
- [210] The plaintiff was awarded approximately \$53,000 (adjusted to 2024 dollars).
- [211] However, although more factually similar, the decisions in both Pacheco and Moore are somewhat dated (2014 and 2011, respectively). In considering them on this assessment, in addition to taking inflation into account, I also bear in mind that awards for non-pecuniary damages have continued to increase over the years: *Callow v. Van Hoek-Patterson*, 2023 BCCA 92 at paras. 16-18, citing *Valdez v. Neron*, 2022 BCCA 301 at para. 58.
- [212] Taking into account the above, I would initially assess non-pecuniary damages at \$50,000.
- [213] However, that does not end the analysis. For the purpose of this analysis, I have assumed that Mr. Ricottone suffered a sentinel bleed prior to August 4, 2018. There is no dispute that, regardless of any negligence on Dr. Long's part, Mr. Ricottone would have required brain surgery to repair that bleed. Non-pecuniary damages should be reduced to account for the damages that he would have suffered anyway as the result of the August 4 bleed: *Dornan v. Silva*, 2021 BCCA 228 at para. 39, citing *Blackwater* at para. 78.
- [214] The question is: what damages would have the August 4 bleed have caused?
- [215] Mr. Ricottone says the fact that the brain surgery was not done prior to August 8 "resulted in the initial significant memory deficits, neurological issues, and functional effects, and the remaining reduced yet permanent memory deficits".
- [216] With respect, in my view, there is no evidence to that effect.
- [217] As Dr. Heran explained on direct examination, the decline in Mr. Ricottone's presentation between August 1 and 4 (when he was not drowsy, confused, or stuporous and was able to manage his own affairs) to August 8 (when he was confused and not doing well) was a reflection of increased damage to his brain in that period. His written opinion was more equivocal. In his report, he opines that the condition was "probably further augmented substantially from the presentation on August 8, 2018" (emphasis added). In neither case does Dr. Heran opine, expressly or impliedly, that Mr. Ricottone's condition would have been wholly prevented had the surgery been performed prior to the larger bleed on August 8. Nor does Dr. Heran quantify or provide any opinion regarding the degree to which Mr. Ricottone's condition was "worsened" by the August 8 SAH.

[218] There being no evidence to the contrary, I accept Dr. Heran's opinion that Mr. Ricottone's condition is worse than it would have been had the August 8 SAH not occurred. However, with no evidence that Mr. Ricottone would not have suffered the same effects regardless of the more significant August 8 SAH, it is appropriate to reduce non-pecuniary damages to account for Mr. Ricottone's "original condition".

[219] If I am wrong on my assessment of negligence or causation, I would award \$25,000 (\$50,000 x 50%) for this head of damages.

IV. Conclusion and Costs

[220] Although I have conducted a fulsome analysis of all of the issues, I have concluded that Dr. Long met the standard of care required of him. Accordingly, Mr. Ricottone's action is dismissed.

[221] If the parties would like to make submissions on costs, they may do so in writing within 30 days of these reasons.

[222] If I receive no submissions on costs, I award costs of the action to Dr. Long at Scale B.

"Ahmad J."

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